STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

AVIATION OFFICE

Statewide Airfield Pavement Management Program

DeLand Municipal Airport– DED
(Regional Reliever)
Deland, Florida
(District 5)

May 2011

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EXECUTIVE SUMMARY

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

The tasks required to achieve this objective at DeLand Municipal Airport included:

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

During March 2011, the PCI survey was performed at DeLand Municipal Airport. The results of the survey indicate that, based on a numerical scale of 0 to 100, the overall area-weighted average PCI of the airfield pavements in 2011 is 76, representing a Satisfactory overall network condition.

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

Table I: Condition Summary by Branch

Branch Name	Area Weighted PCI	Condition Rating	FDOT Minimum Service Level	MicroPAVER Minimum PCI	Action Required
South Apron	79	Satisfactory	65	65	
SE Apron	69	Fair	65	65	
Apron T-Hangars	67	Fair	65	65	
Runway 12-30	100	Good	75	65	
Runway 5-23	100	Good	75	65	
Taxiways Alpha and Parallel AP	49	Poor	65	65	X
Taxiway Bravo	67	Fair	65	65	
Taxiway Charlie	69	Fair	65	65	
Taxiway Delta	52	Poor	65	65	X
Taxiway Echo	67	Fair	65	65	

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

Table II: Condition Summary by Pavement Use

Use	Average Area-Weighted PCI	Condition Rating
Runway	100	Good
Taxiway	55	Poor
Apron	71	Satisfactory
All (Weighted)	**76**	Satisfactory

Table III: Condition Summary by Pavement Rank

Rank*	Average Area-Weighted PCI	Condition Rating
Primary	76	Satisfactory
All (Weighted)	**76**	**Satisfactory**

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

The immediate M&R needs, or needs that have been programmed to be completed in the first year of the 10-year M&R plan based on an unlimited budget at DeLand Municipal Airport, include: SE Apron, Taxiway Parallel AP, Taxiway Alpha, Taxiway Bravo, Taxiway Delta and Taxiway Echo. Pavement conditions in these areas justify either mill and overlay rehabilitation activity or full pavement reconstruction. The immediate needs are summarized in Table IV below.

Table IV: Immediate Major M&R Needs

Branch Name	Section ID	Surface Type	Section Area (ft^2)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
SE Apron	4112	AC	158,440	$1,205,729.00	50	Mill and Overlay	100
SE Apron	4125	AC	23,890	$81,273.79	61	Mill and Overlay	100
Taxiway Parallel AP	105	AC	35,620	$229,072.33	53	Mill and Overlay	100
Taxiway Alpha	150	AC	118,970	$2,209,272.75	23	Reconstruction	100
Taxiway Alpha	155	AAC	12,000	$72,456.04	54	Mill and Overlay	100
Taxiway Alpha	160	AC	15,680	$63,864.66	59	Mill and Overlay	100
Taxiway Alpha	162	AC	18,030	$176,730.11	38	Reconstruction	100
Taxiway Alpha	165	AC	20,600	$247,076.43	36	Reconstruction	100
Taxiway Bravo	205	AC	30,660	$95,781.84	62	Mill and Overlay	100
Taxiway Bravo	215	AAC	8,190	$21,031.92	64	Mill and Overlay	100
Taxiway Delta	450	AC	151,790	$1,155,122.47	50	Mill and Overlay	100
Taxiway Echo	510	AC	6,050	$72,563.71	36	Reconstruction	100
			Total	**$5,629,975.05**	**49**		**100**

* Costs are adjusted for inflation.

A forecast of Major M&R needs for a 10-year period, starting from 2011, was developed using an unlimited budget. The analysis identified ongoing maintenance needs and major M&R during that interval. The results of this analysis are provided in Table V below.

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

Year	Preventative	Major M&R	Total Year Cost
2011	$300,848.24	$5,629,975.04	$5,930,823.28
2012	$225,243.75	$18,303.68	$243,547.43
2013	$225,301.03	$259,552.73	$484,853.76
2014	$268,572.88	$0.00	$268,572.88
2015	$244,294.41	$1,017,340.70	$1,261,635.10
2016	$267,233.68	$304,846.40	$572,080.07
2017	$310,214.30	$228,042.67	$538,256.96
2018	$344,319.82	$222,629.68	$566,949.50
2019	$310,976.08	$1,080,896.01	$1,391,872.09
2020	$355,100.80	$158,787.65	$513,888.45
Total	**$2,852,104.99**	**$8,920,374.56**	**$11,772,479.52**

Note: Costs are adjusted for inflation.

The implementation of the 10-Year major M&R plan is expected to provide an improvement in the overall condition of the airfield pavement, where the area-weighted PCI would increase from 76 in 2011 to 81 in 2020. Appendix F lists the major M&R for the 10-Year program. Appendix G graphically depicts the activity.

It is important to note that although preventative and some major M&R activities would have to be conducted over several years, the area-weighted PCI value for all DeLand Municipal Airport pavements in 2020 may remain near 81. 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 DeLand Municipal Airport is conducted at some point in the 10-year plan.

1. INTRODUCTION

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

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

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

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

1.1 Purpose

This Florida Airport Pavement Evaluation Report is intended to:

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

1.2 FDOT Statewide Airfield Pavement Management Program

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

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

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

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

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

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

1.3 Organization

1.3.1 *Aviation Office Program Manager Role*

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

1.3.2 *Consultant Role*

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

1.3.3 *Airport Role*

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

1.4 Pavement Types and Pavement Management

1.4.1 *Pavement basics*

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

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

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

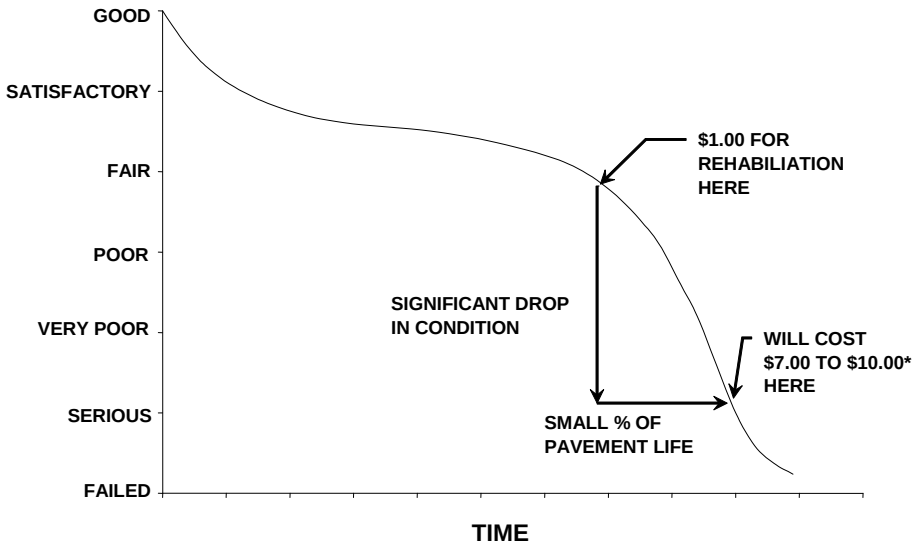
A small percentage of the airport pavements in Florida are composed of asphalt concrete surface over Portland Cement Concrete (APC). This pavement type is known as “composite” pavement.

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

1.4.2 *Pavement Management System Concept*

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

Figure 1-1: Pavement Life Cycle



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

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

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

1.4.3 *Pavement Inspection Methodology for the SAPMP*

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

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

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

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

Table 1-1: Sampling Rate for FDOT Condition Surveys

AC Pavements			PCC Pavements		
N	**n**		**N**	**n**	
	Runway	**Others**		**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
≥51	20% but ≤20	10% but ≤10	31-40	8	4
			41-50	10	5
			≥51	20% but ≤20	10% but ≤10

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

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

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

Figure 1-2: PCI Rating Scale

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

1.5 Definitions

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

Base Course - 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.

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

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

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

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

Critical PCI - 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.

Distress Type - 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.

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

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

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

Major M&R (e.g. Rehabilitation) - 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.

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

Minimum Condition Level - 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.

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

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

Pavement Evaluation - 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.

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

Pavement Surface Type - The surface of pavement is identified as one of four types:

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

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.

Reconstruction - 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.

Rehabilitation - 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.

Sample Unit - 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 ± 2,000 square feet for AC-surfaced pavements and 20 ± 8 slabs for PCC-surfaced pavements.

Section - 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.

Section ID - 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.

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

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

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

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 AND PAVEMENT INVENTORY

DeLand Municipal Airport (DED) consists of two runways; RW 5-23, which is 75-ft wide by 4,301-ft long and RW 12-30, which is 100-ft wide by 6,001-ft long. Taxiways Alpha, Bravo, Delta and Echo are all 50-ft wide and used to direct air traffic from the runways to the apron and hangar facilities. Currently the airport has multiple T-Hangar and conventional hangar facilities located on the south and west side of the airport and tie-down spaces located throughout the apron. All of the pavement for the runway, taxiways, apron and hangars is constructed with Asphalt Concrete. The only Portland Cement Concrete pavement on the airfield is located at the South West hangars, which was recently constructed and was not inspected.

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

The City of Deland began development of Deland Municipal Airport in the 1920's, and later donated the facility to the US Navy in 1942 where it became known as the Naval Air Station Deland. The facilities primary focus was advanced training for Navy flight crews. Naval Air Station Deland was decommissioned following the end of World War II, where the control tower was closed and the City of Deland regained control of the airport. Currently the airport serves as an uncontrolled general aviation reliever to commercial operations at Daytona Beach International Airport, Orlando Sanford International Airport and Orlando International Airport.

This airport is designated as a Regional Reliever airport and is located in District 5 of the Florida Department of Transportation.

2.1 Network Definition

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

2.1.1 *Branch Section Identification*

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

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

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

2.1.2 *System Inventory and Network Definition Update*

The System Inventory and Network Definition drawings are used to identify changes in the network since the most recent update from the 2006/2008 inspections and also to plan the field inspection activities for the 2011 survey. Prior to the field inspection process, the System Inventory drawing was updated from the previous inspection with notes indicating recent construction projects on the various Sections of pavement throughout the airfield. This System Inventory drawing is used to update the Network Definition drawing.

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

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

Table 2-1: Construction Since Last Inspection & Anticipated Construction Activity

Construction Year	Location	Work Type / Pavement Section
2010	Taxiway G	Rehabilitation
2011	Runway 12-30	Rehabilitation
2012	Runway 5-23	Rehabilitation

2.2 Pavement Inventory

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

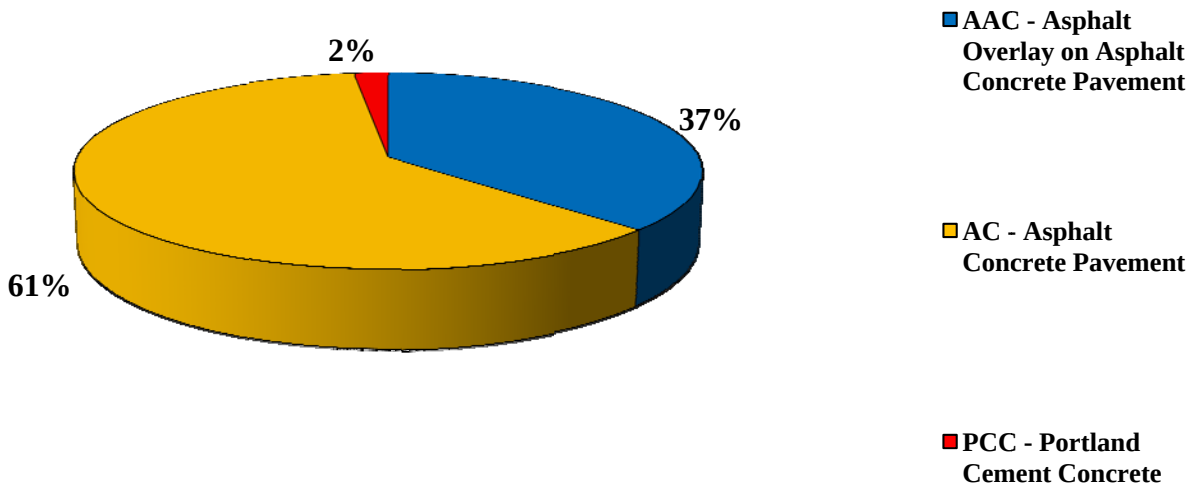
The total airfield pavement area in 2011 at DeLand Municipal Airport is 2,723,450 square feet. The breakdown of pavement area for each pavement use is provided in Table 2-2.

Table 2-2: Pavement Area by Pavement Use

Use	Area (ft^2)	% of Total Area
Runway	948,470	35%
Taxiway	796,660	29%
Apron	978,320	36%
All (Weighted)	**2,723,450**	**100%**

Figure 2-1 presents the breakdown of the pavement area at DeLand Municipal Airport by surface type.

Figure 2-1: Pavement Area by Surface Type



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

Table 2-3: Branch and Section Inventory

Branch Name	Branch ID	Section ID	True Area (ft^2)	Section Rank	Surface Type	Last Const. Date	Total Samples Inspected	Total Samples
South Apron	AP S	5105	41,990.00	P	AC	1/1/1991	2	6
South Apron	AP S	5310	53,950.00	P	PCC	7/31/2008	0	10
South Apron	AP S	5305	95,270.00	P	AC	7/31/2008	3	23
SE Apron	AP SE	4112	158,440.00	P	AC	1/1/2001	4	35
SE Apron	AP SE	4110	65,920.00	P	AC	1/1/2006	2	8
SE Apron	AP SE	4115	332,270.00	P	AC	1/1/2006	5	48
SE Apron	AP SE	4120	47,390.00	P	AC	1/1/2006	1	6
SE Apron	AP SE	4125	23,890.00	P	AC	1/1/2006	1	3
SE Apron	AP SE	4130	43,010.00	P	AC	1/1/2006	2	8
SE Apron	AP SE	4135	20,920.00	P	AC	1/1/2006	1	5
Apron T-Hangars	AP T-HANG	4305	95,270.00	P	AC	12/25/1999	3	23
Runway 12-30	RW 12-30	6105	600,000.00	P	AAC	1/1/1991	0	120
Runway 5-23	RW 5-23	6215	206,250.00	P	AAC	1/1/1996	0	55
Runway 5-23	RW 5-23	6205	30,000.00	P	AAC	1/1/1997	0	8
Runway 5-23	RW 5-23	6210	30,000.00	P	AAC	1/1/1997	0	8
Runway 5-23	RW 5-23	6218	9,390.00	P	AAC	1/1/1997	0	3
Runway 5-23	RW 5-23	6220	12,530.00	P	AAC	1/1/1997	0	3
Runway 5-23	RW 5-23	6225	36,375.00	P	AAC	1/1/1997	0	10
Runway 5-23	RW 5-23	6230	23,925.00	P	AAC	1/1/1997	0	7
Taxiway Alpha	TW A & N-S	162	18,030.00	P	AC	1/1/1942	1	3
Taxiway Alpha	TW A & N-S	165	20,600.00	P	AC	1/1/1980	1	3
Taxiway Parallel AP	TW A & N-S	105	35,620.00	P	AC	1/1/1991	2	7
Taxiway Alpha	TW A & N-S	150	118,970.00	P	AC	1/1/1991	3	23
Taxiway Alpha	TW A & N-S	155	12,000.00	P	AAC	1/1/1991	1	2
Taxiway Alpha	TW A & N-S	160	15,680.00	P	AC	1/1/1991	1	2
Taxiway Parallel AP	TW A & N-S	110	102,400.00	P	AC	1/1/1992	3	26
Taxiway Parallel AP	TW A & N-S	106	7,580.00	P	AAC	1/1/1996	1	1
Taxiway Parallel AP	TW A & N-S	115	47,950.00	P	AC	1/1/1996	4	16
Taxiway Bravo	TW B	205	30,660.00	P	AC	1/1/1942	2	4
Taxiway Bravo	TW B	220	107,700.00	P	AC	1/1/1985	3	21
Taxiway Bravo	TW B	215	8,190.00	P	AAC	1/1/1996	1	1
Taxiway Bravo	TW B	206	9,160.00	P	AAC	1/1/1997	1	1
Taxiway Charlie	TW C	305	16,070.00	P	AC	1/1/1991	1	3
Taxiway Charlie	TW C	306	6,920.00	P	AAC	1/1/1996	1	1
Taxiway Delta	TW D	405	16,300.00	P	AC	1/1/1942	1	3

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

Branch Name	Branch ID	Section ID	True Area (ft^2)	Section Rank	Surface Type	Last Const. Date	Total Samples Inspected	Sample Units in Section
Taxiway Delta	TW D	450	151,790.00	P	AC	1/1/1991	4	30
Taxiway Delta	TW D	410	6,920.00	P	AAC	1/1/1997	1	1
Taxiway Echo	TW E	505	58,070.00	P	AC	1/1/1991	3	11
Taxiway Echo	TW E	510	6,050.00	P	AC	1/1/1991	1	1

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

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

3. PAVEMENT CONDITION

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

3.1 Inspection Methodology

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

Table 3-1: Pavement Distresses for Asphalt Concrete Surfaces

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

Source: U.S. Army CERL, FDOT Airfield Inspection Reference Manual

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

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

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

3.2 Pavement Condition Index Results

According to the 2011 survey, the overall area-weighted PCI at DeLand Municipal Airport is 76, representing a Satisfactory overall network condition.

Overall the airport exhibited pavement distresses associated with climate and age distresses. Asphalt Concrete pavement distresses include; weathering, raveling, longitudinal and transverse cracking, and block cracking distresses of which are common of pavements of similar age. Runway 12-30 and 5-53 are scheduled to be rehabilitated in 2011 and 2012 respectively. Due to these rehabilitation projects in the near future, these pavement sections were not inspected. The pavement to be rehabilitated were assumed to have a PCI of 100.

Taxiways throughout the airfield exhibited low to medium severity longitudinal and transverse cracking with low to medium severity weathering and raveling. Taxiway Alpha exhibited the most distress, with low to medium severity block cracking throughout and low to medium severity weathering and raveling.

The apron section was in relatively good shape, but samples located mostly in the pavement section that was previously seal coated exhibited low severity block cracking with low severity longitudinal and transverse cracking along with medium severity weathering and raveling.

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

Figure 3-1 provides the PCI distribution by rating category for DeLand Municipal Airport.

Figure 3-1: Network PCI Distribution by Rating Category

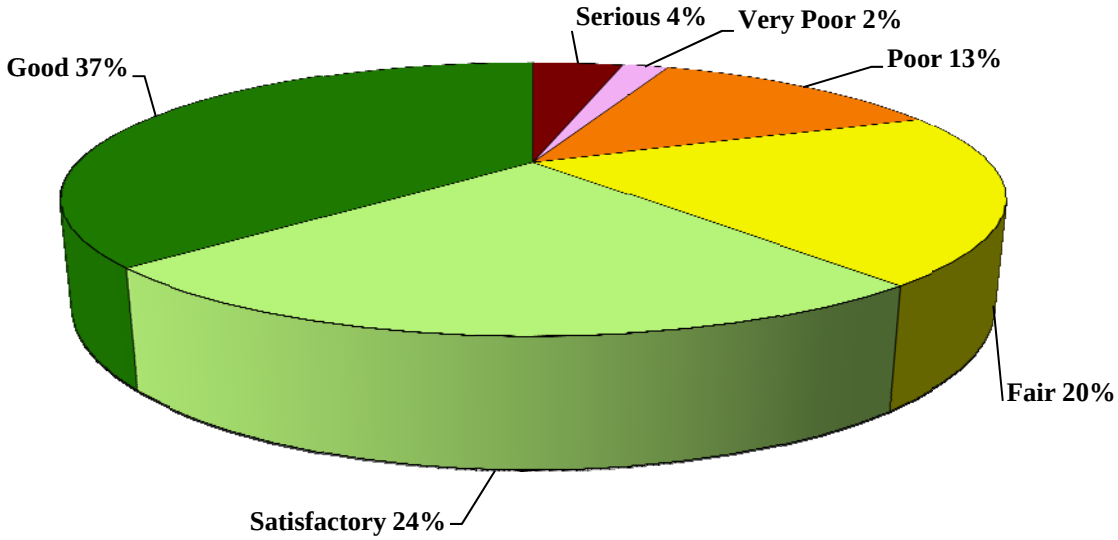


Figure 3-1a: Condition Rating Summary

Condition Rating	Total Area (ft^2)	Percent
Good	1,002,420	37%
Satisfactory	641,950	24%
Fair	557,580	20%
Poor	357,850	13%
Very Poor	44,680	20%
Serious	118,970	40%
Failed	0	0%

Approximately 61% of the network is in Good and Satisfactory condition while 6% of the network is in Very Poor and Serious condition. Table 3-3 illustrates the area-weighted PCI computed individually for each pavement use.

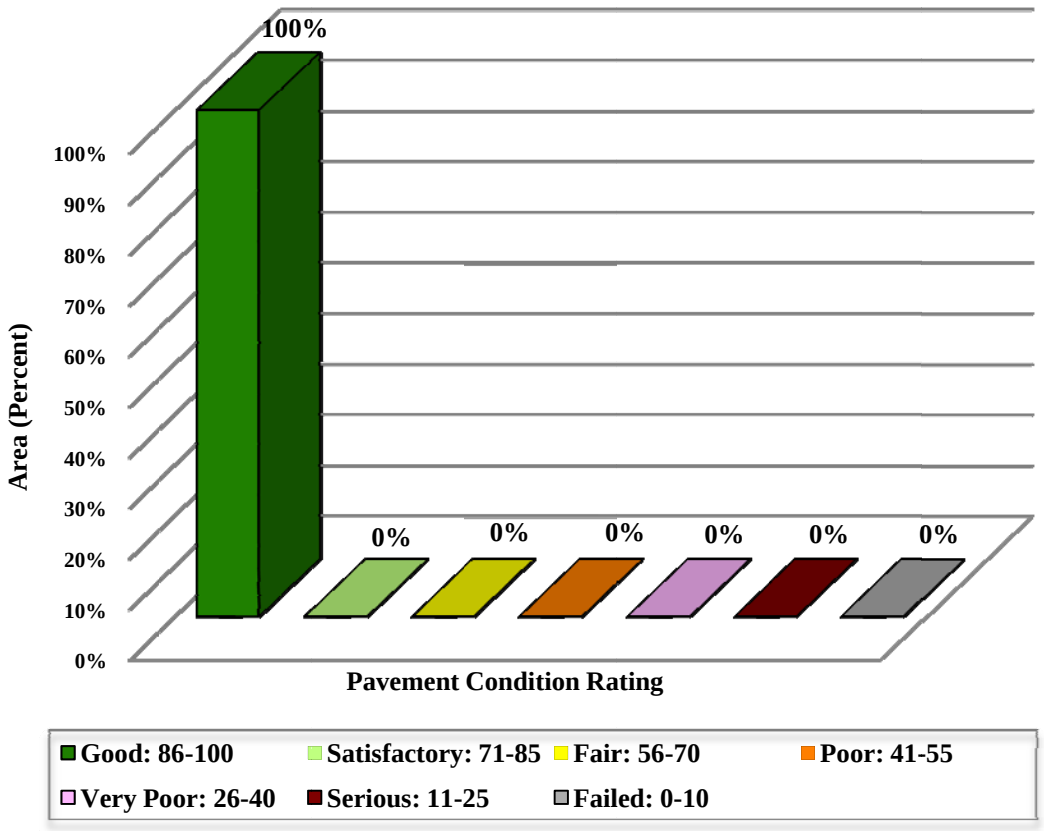
Table 3-2: Condition by Pavement Use

Use	Area-Weighted PCI	Condition Rating
Runway	100	Good
Taxiway	55	Poor
Apron	71	Satisfactory
All (Weighted)	**76**	Satisfactory

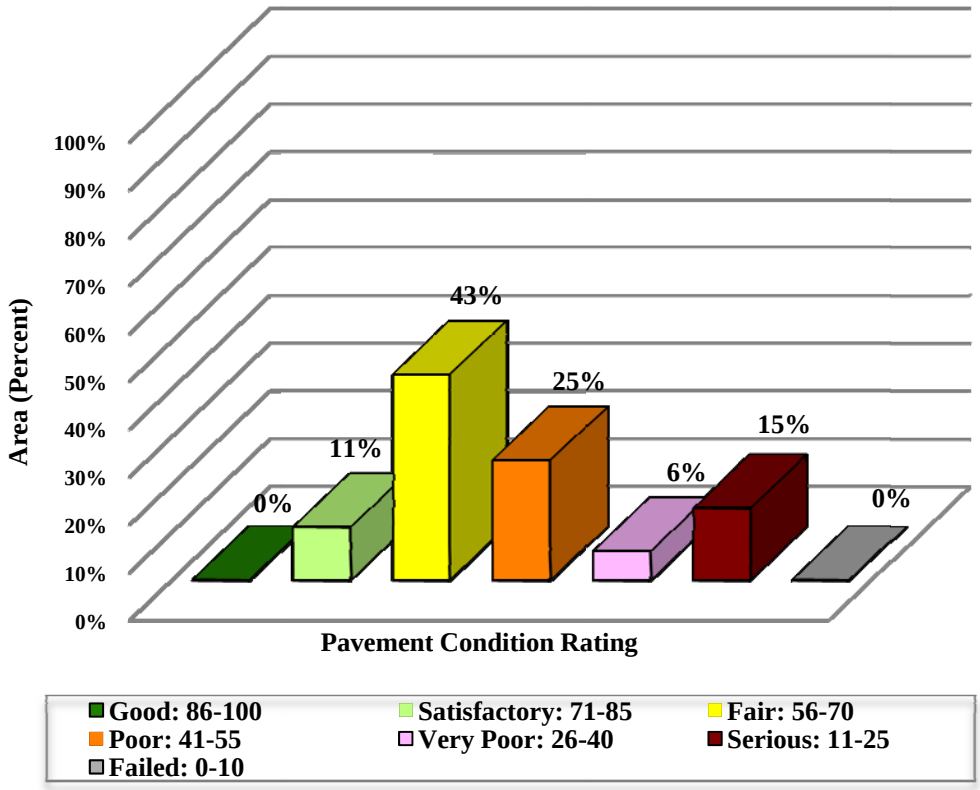
Figure 3-2 presents the breakdown of PCI by range for each pavement use.

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

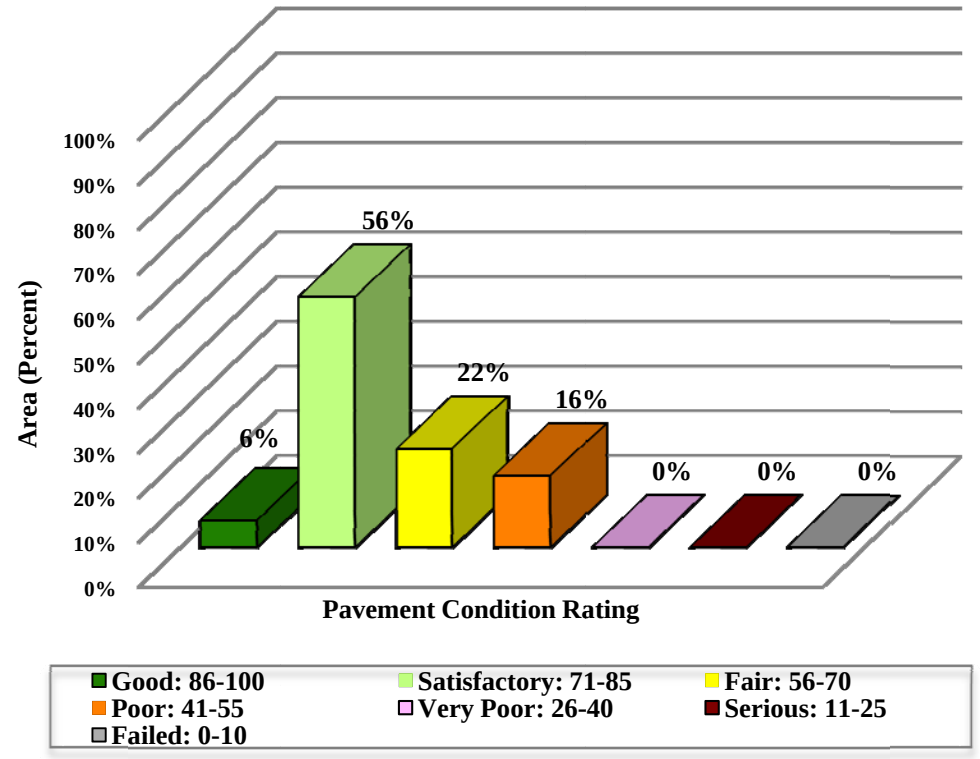
(a) Runway



(b) Taxiway



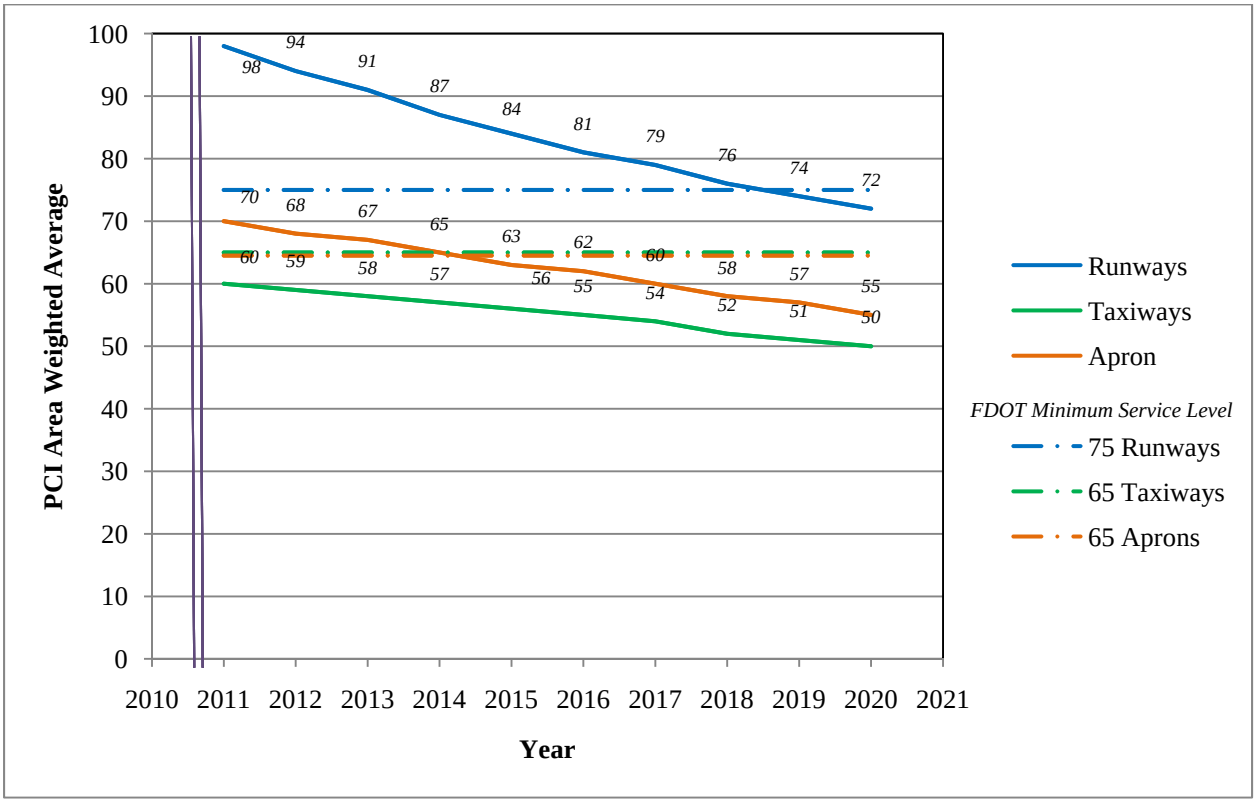
(c) Apron



4. PAVEMENT CONDITION PREDICTION

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

Figure 4-1: Predicted PCI by Pavement Use



Appendix D presents the tabular summary of the predicted Section PCI for each year from 2011 to 2020.

5. MAINTENANCE POLICIES AND COSTS

5.1 Policies

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

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

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

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

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

Table 5-1: Routine Maintenance Activities for Airfield Pavements

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

*L = Low, M = Medium, H = High

Table 5-2: Critical PCI for Regional Reliever Airports

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65

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

Table 5-3: FDOT Minimum Service Level PCI for Regional Reliever Airports

Minimum PCI		
Runway	**Taxiway**	**Apron**
75	65	65

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

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

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

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

5.2 Unit Costs

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

5.3 M&R Activities

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

Table 5-5: Maintenance Unit Costs for FDOT

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

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

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

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

	Activity	PCI Trigger	Cost/SqFt
Maintenance	Crack Sealing and Full-Depth Patching	90	$0.06
		80	$0.24
Rehabilitation	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	70	$3.00
		60	$3.42
		50	$6.29
		40	$6.29
	Reconstruction	30	$13.62
		20	$13.62

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

6. PAVEMENT REHABILITATION NEEDS ANALYSIS

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

The objective of the M&R analysis is to observe the effect of different fiscal scenarios on the network condition, over a period of ten years, starting from 2011. The analysis was conducted using an unlimited budget. An unlimited budget allows all M&R needs to be identified along with the associated cost regardless of priority.

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

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

Branch Name	Section ID	Surface Type	Section Area (ft^2)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
SE Apron	4112	AC	158,440	$1,205,729.00	50	Mill and Overlay	100
SE Apron	4125	AC	23,890	$81,273.79	61	Mill and Overlay	100
Taxiway Parallel AP	105	AC	35,620	$229,072.33	53	Mill and Overlay	100
Taxiway Alpha	150	AC	118,970	$2,209,272.75	23	Reconstruction	100
Taxiway Alpha	155	AAC	12,000	$72,456.04	54	Mill and Overlay	100
Taxiway Alpha	160	AC	15,680	$63,864.66	59	Mill and Overlay	100
Taxiway Alpha	162	AC	18,030	$176,730.11	38	Reconstruction	100
Taxiway Alpha	165	AC	20,600	$247,076.43	36	Reconstruction	100
Taxiway Bravo	205	AC	30,660	$95,781.84	62	Mill and Overlay	100
Taxiway Bravo	215	AAC	8,190	$21,031.92	64	Mill and Overlay	100
Taxiway Delta	450	AC	151,790	$1,155,122.47	50	Mill and Overlay	100
Taxiway Echo	510	AC	6,050	$72,563.71	36	Reconstruction	100
			Total	**$5,629,975.05**	**49**		**100**

* Costs are adjusted for inflation.

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

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

Branch Name	Section ID	Surface Type	Section Area (ft^2)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
SE Apron	4112	AC	158,440	$102,986.00	50	Microsurfacing	100
SE Apron	4125	AC	23,890	$15,528.50	61	Microsurfacing	100
Taxiway Parallel AP	105	AC	35,620	$23,153.00	53	Microsurfacing	100
Taxiway Alpha	150	AC	118,970	$2,209,272.75	23	Reconstruction	100
Taxiway Alpha	155	AAC	12,000	$7,800.00	54	Microsurfacing	100
Taxiway Alpha	160	AC	15,680	$10,192.00	59	Microsurfacing	100
Taxiway Alpha	162	AC	18,030	$176,730.11	38	Reconstruction	100
Taxiway Alpha	165	AC	20,600	$247,076.43	36	Reconstruction	100
Taxiway Bravo	205	AC	30,660	$19,929.00	62	Microsurfacing	100
Taxiway Bravo	215	AAC	8,190	$5,323.50	64	Microsurfacing	100
Taxiway Delta	450	AC	151,790	$98,663.50	50	Microsurfacing	100
Taxiway Echo	510	AC	6,050	$72,563.71	36	Reconstruction	100
			Total	**$2,989,218.50**	**49**		**100**

* Costs are adjusted for inflation.

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

Table 6-3: Summary of Year 1 Maintenance Activities

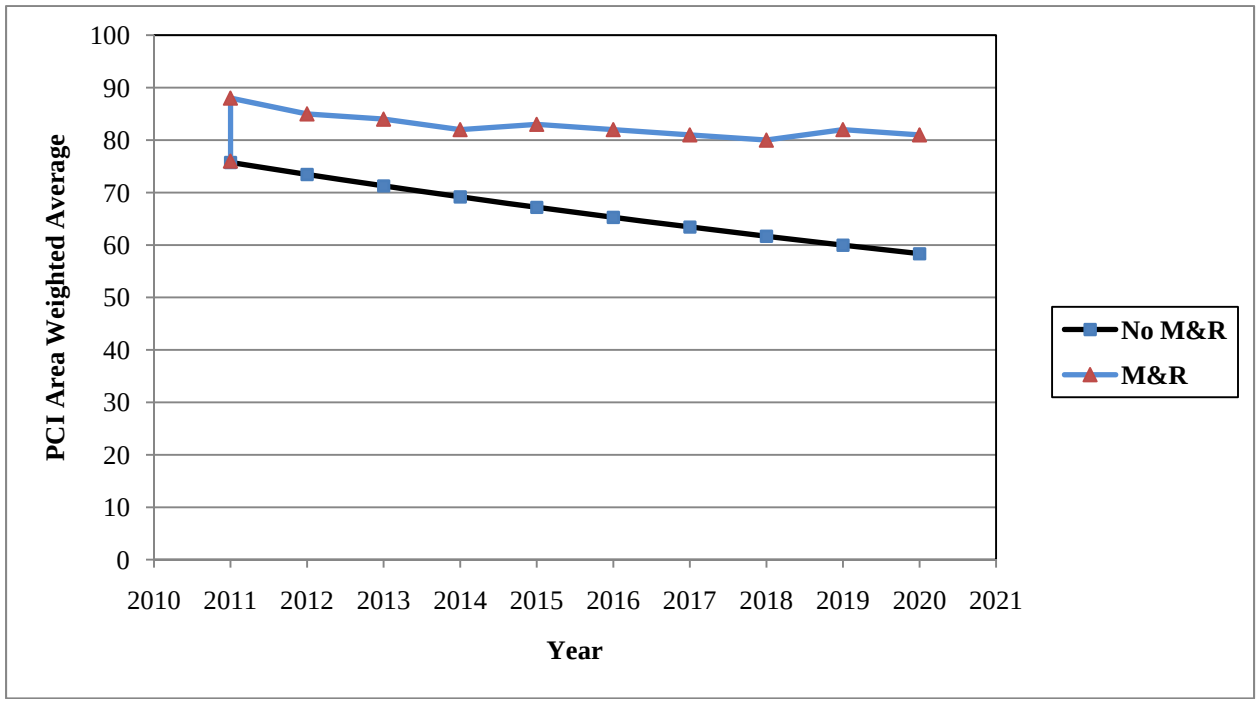
Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
South Apron	AP S	5105	WEATH/RAVEL	L	Surface Seal - Rejuvenating	25,982.10	SqFt	$0.40	$10,392.94
South Apron	AP S	5305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	74,666.90	SqFt	$0.40	$29,867.01
South Apron	AP S	5305	WEATH/RAVEL	M	Surface Seal - Coat Tar	1,549.10	SqFt	$0.40	$619.64
SE Apron	AP SE	4110	L & T CR	M	Crack Sealing - AC	945.6	Ft	$2.25	$2,127.62
SE Apron	AP SE	4110	OIL SPILLAGE	N	Patching - AC Shallow	23.1	SqFt	$2.90	$67.06
SE Apron	AP SE	4110	WEATH/RAVEL	L	Surface Seal - Rejuvenating	784.8	SqFt	$0.40	$313.90
SE Apron	AP SE	4115	L & T CR	M	Crack Sealing - AC	467.3	Ft	$2.25	$1,051.40
SE Apron	AP SE	4115	OIL SPILLAGE	N	Patching - AC Shallow	50.5	SqFt	$2.90	$146.35
SE Apron	AP SE	4115	WEATH/RAVEL	L	Surface Seal - Rejuvenating	125,465.90	SqFt	$0.40	$50,186.79
SE Apron	AP SE	4115	WEATH/RAVEL	M	Surface Seal - Coat Tar	55,377.90	SqFt	$0.40	$22,151.33
SE Apron	AP SE	4120	WEATH/RAVEL	L	Surface Seal - Rejuvenating	14,217.00	SqFt	$0.40	$5,686.84
SE Apron	AP SE	4130	WEATH/RAVEL	L	Surface Seal - Rejuvenating	18,980.50	SqFt	$0.40	$7,592.26
SE Apron	AP SE	4135	OIL SPILLAGE	N	Patching - AC Shallow	128.5	SqFt	$2.90	$372.65
SE Apron	AP SE	4135	WEATH/RAVEL	L	Surface Seal - Rejuvenating	16,736.00	SqFt	$0.40	$6,694.46
Apron T-Hangars	AP T-HANG	4305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	72,540.60	SqFt	$0.40	$29,016.46
Apron T-Hangars	AP T-HANG	4305	WEATH/RAVEL	M	Surface Seal - Coat Tar	4,145.10	SqFt	$0.40	$1,658.07
Taxiway Parallel AP	TW A & N-S	106	WEATH/RAVEL	L	Surface Seal - Rejuvenating	4,000.00	SqFt	$0.40	$1,600.01
Taxiway Parallel AP	TW A & N-S	106	L & T CR	M	Crack Sealing - AC	175	Ft	$2.25	$393.76
Taxiway Parallel AP	TW A & N-S	110	WEATH/RAVEL	L	Surface Seal - Rejuvenating	89,600.00	SqFt	$0.40	$35,840.31
Taxiway Parallel AP	TW A & N-S	115	L & T CR	M	Crack Sealing - AC	43	Ft	$2.25	$96.69
Taxiway Parallel AP	TW A & N-S	115	WEATH/RAVEL	L	Surface Seal - Rejuvenating	28,994.00	SqFt	$0.40	$11,597.71
Taxiway Parallel AP	TW A & N-S	115	WEATH/RAVEL	M	Surface Seal - Coat Tar	4,603.20	SqFt	$0.40	$1,841.29
Taxiway Bravo	TW B	206	WEATH/RAVEL	L	Surface Seal - Rejuvenating	7,328.00	SqFt	$0.40	$2,931.22
Taxiway Bravo	TW B	220	WEATH/RAVEL	L	Surface Seal - Rejuvenating	107,699.10	SqFt	$0.40	$43,080.00

Table 6-3: Summary of Year 1 Maintenance Activities (Continued)

Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
Taxiway Charlie	TW C	305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	16,069.90	SqFt	$0.40	$6,428.00
Taxiway Charlie	TW C	306	WEATH/RAVEL	L	Surface Seal - Rejuvenating	5,536.00	SqFt	$0.40	$2,214.42
Taxiway Delta	TW D	405	WEATH/RAVEL	L	Surface Seal - Rejuvenating	14,261.50	SqFt	$0.40	$5,704.67
Taxiway Delta	TW D	410	L & T CR	M	Crack Sealing - AC	40	Ft	$2.25	$90.00
Taxiway Delta	TW D	410	WEATH/RAVEL	L	Surface Seal - Rejuvenating	6,055.00	SqFt	$0.40	$2,422.02
Taxiway Echo	TW E	505	WEATH/RAVEL	L	Surface Seal - Rejuvenating	46,658.00	SqFt	$0.40	$18,663.37
								Total =	$300,848.25

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

Figure 6-1: Budget Scenario Analysis



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

- The PCI will deteriorate from 76 in 2011 to 58 in ten years if no M&R activities are performed.

The PCI will remain at or above 81 through the 10-year analysis period under the unlimited budget scenario. A 2020 PCI of 81 with this scenario is 23 PCI points higher than a "No M&R" scenario. The total cost for Major M&R over this 10-year period is about $8.9 million.

7. MAINTENANCE AND REHABILITATION PLAN

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

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

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

Year	Preventative	Major M&R	Total Year Cost
2011	$300,848.24	$5,629,975.04	$5,930,823.28
2012	$225,243.75	$18,303.68	$243,547.43
2013	$225,301.03	$259,552.73	$484,853.76
2014	$268,572.88	$0.00	$268,572.88
2015	$244,294.41	$1,017,340.70	$1,261,635.10
2016	$267,233.68	$304,846.40	$572,080.07
2017	$310,214.30	$228,042.67	$538,256.96
2018	$344,319.82	$222,629.68	$566,949.50
2019	$310,976.08	$1,080,896.01	$1,391,872.09
2020	$355,100.80	$158,787.65	$513,888.45
Total	**$2,852,104.99**	**$8,920,374.56**	**$11,772,479.52**

Note: Costs are adjusted for inflation.

Approximately 63% of the total Major M&R cost is required in the first year (2011). According to the 2011 inspections, the following pavement sections were in immediate need of Major M&R Activity:

- **SE Apron** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.
- **Taxiway Parallel AP** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.
- **Taxiway Alpha** – Asphalt Pavement mill and overlay along with reconstruction activity per the FAA P-401 Specification.
- **Taxiway Bravo** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.
- **Taxiway Delta** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.

- **Taxiway Echo** – Asphalt Pavement reconstruction activity per the FAA P-401 Specification.

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

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

8. VISUAL AIDS

8.1 System Inventory and Network Definition Drawings

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

8.2 Condition Map

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

8.3 10-Year M&R Map

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

8.4 Photographs

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

9. RECOMMENDATIONS

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

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

- **SE Apron** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.
- **Taxiway Parallel AP** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.
- **Taxiway Alpha** – Asphalt Pavement mill and overlay along with reconstruction activity per the FAA P-401 Specification.
- **Taxiway Bravo** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.
- **Taxiway Delta** – Asphalt Pavement mill and overlay activity per the FAA P-401 Specification.
- **Taxiway Echo** – Asphalt Pavement reconstruction activity per the FAA P-401 Specification.

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

APPENDIX A

NETWORK DEFINITION MAP

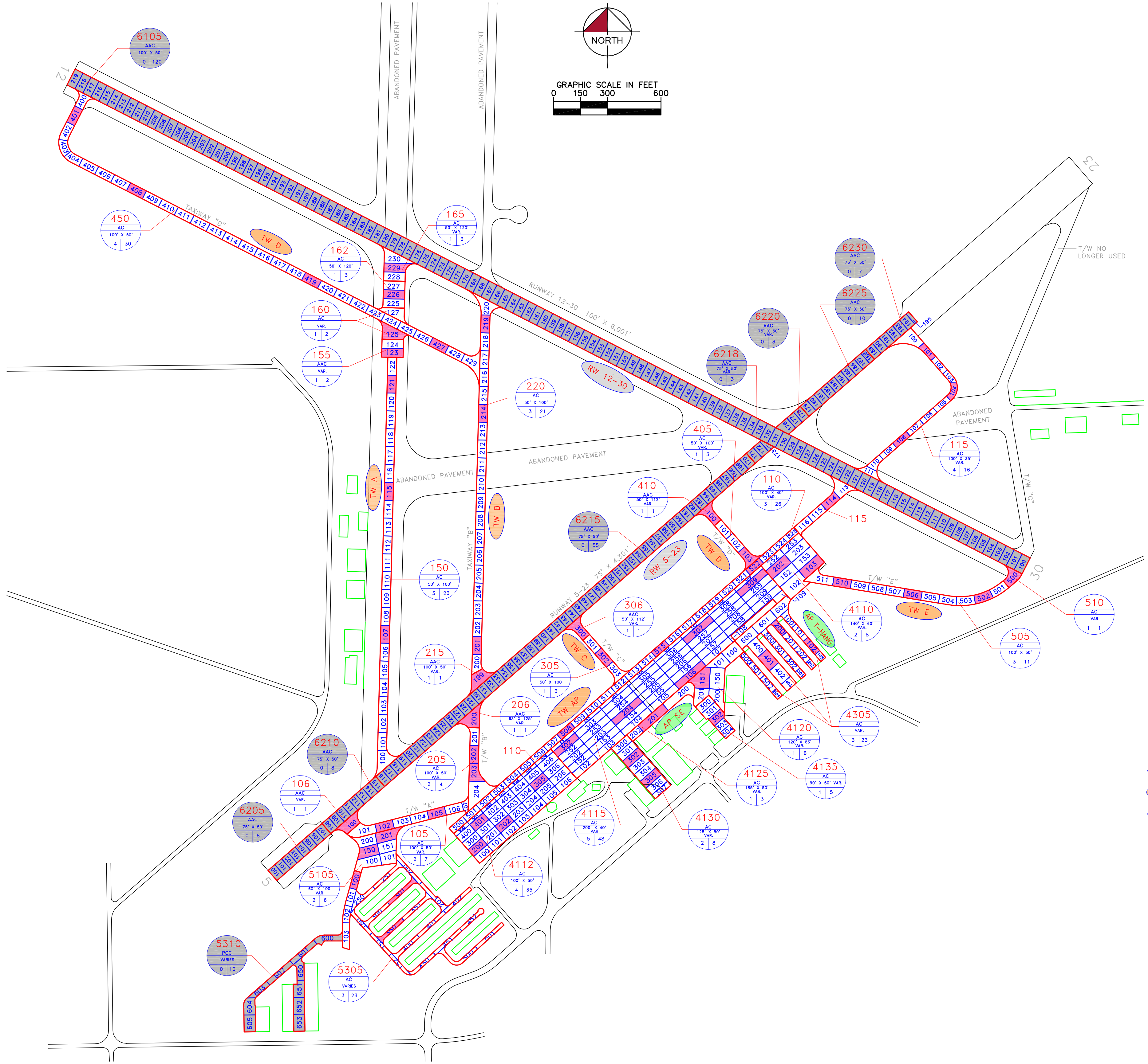
SYSTEM INVENTORY MAP

PAVEMENT INVENTORY TABLE

WORK HISTORY REPORT

GPS COORDINATES - DELAND MUNICIPAL AIRPORT				
LOCATION	SECTION	SAMPLE	LATITUDE	LONGITUDE
RW 5-23	6230	190	29.06829951	-81.27845468
RW 5-23	6230	193	29.06857154	-81.27810168
RW 5-23	6225	181	29.06751064	-81.27947835
RW 5-23	6225	185	29.06787334	-81.2790077
RW 5-23	6220	177	29.06714793	-81.27994901
RW 5-23	6218	172	29.06669455	-81.28053731
RW 5-23	6215	117	29.06170718	-81.28700838
RW 5-23	6215	121	29.06206991	-81.28653778
RW 5-23	6215	125	29.06243264	-81.28606717
RW 5-23	6215	130	29.06288604	-81.28547891
RW 5-23	6215	135	29.06333945	-81.28489065
RW 5-23	6215	143	29.06406489	-81.28394941
RW 5-23	6215	149	29.06460896	-81.28324347
RW 5-23	6215	154	29.06506236	-81.28265519
RW 5-23	6215	159	29.06551575	-81.2820669
RW 5-23	6215	164	29.06596914	-81.2814786
RW 5-23	6215	168	29.06633185	-81.28100796
RW 5-23	6210	110	29.0610724	-81.28783192
RW 5-23	6210	114	29.06143513	-81.28736133
RW 5-23	6205	102	29.06034693	-81.28877311
RW 5-23	6205	106	29.06070967	-81.28830252
RW 12-30	6105	103	29.06513178	-81.27637813
RW 12-30	6105	107	29.06538141	-81.27693599
RW 12-30	6105	110	29.06556863	-81.27735438
RW 12-30	6105	114	29.06581826	-81.27791224
RW 12-30	6105	121	29.0662551	-81.27888851
RW 12-30	6105	128	29.06669193	-81.27986478
RW 12-30	6105	133	29.06700395	-81.28056213
RW 12-30	6105	138	29.06731597	-81.28125947
RW 12-30	6105	144	29.06769038	-81.2820963
RW 12-30	6105	149	29.06800239	-81.28279365
RW 12-30	6105	153	29.06825199	-81.28335154
RW 12-30	6105	159	29.06862639	-81.28418838
RW 12-30	6105	164	29.06893839	-81.28488575
RW 12-30	6105	170	29.06931278	-81.2857226
RW 12-30	6105	173	29.06949997	-81.28614103
RW 12-30	6105	177	29.06974956	-81.28669893
RW 12-30	6105	184	29.07018634	-81.28767527
RW 12-30	6105	191	29.07062311	-81.28865162
RW 12-30	6105	194	29.07081029	-81.28907006
RW 12-30	6105	198	29.07105987	-81.28962797
RW 12-30	6105	201	29.07124705	-81.29004642
RW 12-30	6105	205	29.07149662	-81.29060434
RW 12-30	6105	212	29.07193337	-81.29158071
RW 12-30	6105	219	29.07237011	-81.29255709
AP S	5310	602	29.05862313	-81.2889328
AP S	5310	653	29.05785715	-81.28859211
AP S	5305	100	29.06005338	-81.28761564
AP S	5305	301	29.05991034	-81.28676416
AP S	5305	350	29.05925625	-81.28702355
AP S	5105	150	29.06048658	-81.2873926
AP S	5105	201	29.06076749	-81.2870126
AP T-HANG	4305	102	29.0636726	-81.27964319
AP T-HANG	4305	200	29.06396169	-81.28022714
AP T-HANG	4305	401	29.06345407	-81.28040142
AP SE	4135	302	29.06257086	-81.28129234
AP SE	4130	302	29.06194581	-81.28275918
AP SE	4130	305	29.0616357	-81.28244955
AP SE	4125	201	29.06255934	-81.28241406
AP SE	4120	151	29.06315747	-81.28158382
AP SE	4115	106	29.06322404	-81.2817652
AP SE	4115	204	29.06266401	-81.28287158
AP SE	4115	302	29.06214024	-81.28393089
AP SE	4115	307	29.06391754	-81.28162484
AP SE	4115	309	29.06464296	-81.28068358
AP SE	4112	200	29.06056296	-81.28547892
AP SE	4112	202	29.06092568	-81.28500832
AP SE	4112	305	29.06157313	-81.28440562
AP SE	4112	401	29.06095106	-81.28545004
AP SE	4110	103	29.06489503	-81.27964446
AP SE	4110	202	29.06488924	-81.28022161
TW E	510	500	29.06476659	-81.27615427
TW E	505	502	29.06443056	-81.27663974
TW E	505	506	29.06447016	-81.27787423
TW E	505	510	29.06464555	-81.2791103
TW D	450	401	29.07180481	-81.29256154
TW D	450	408	29.07065278	-81.29147754
TW D	450	419	29.06928012	-81.28840901
TW D	450	427	29.06828178	-81.2861774

NOTE: GEODETICS REPRESENT DECIMAL DEGREES (NAD 83 FLORIDA STATE PLANES, EAST ZONE, US FOOT). ALL GPS COORDINATES ARE AT THE CENTROID OF THE SAMPLE UNITS.



GPS COORDINATES - DELAND MUNICIPAL AIRPORT				
LOCATION	SECTION	SAMPLE	LATITUDE	LONGITUDE
TW D	410	100	29.06572115	-81.28144395
TW D	405	103	29.06501351	-81.28073741
TW C	306	300	29.06395096	-81.28374081
TW C	305	302	29.06348597	-81.28327653
TW B	220	201	29.06366733	-81.28549828
TW B	220	214	29.06724149	-81.28540196
TW B	220	219	29.06861681	-81.28536447
TW B	215	199	29.06312639	-81.28544569
TW B	206	200	29.06258273	-81.2855778
TW B	205	202	29.06199058	-81.28554346
TW B	205	203	29.06169467	-81.28551598
TW A & N-S	165	229	29.06949265	-81.28687679
TW A & N-S	162	226	29.06906637	-81.28696537
TW A & N-S	160	125	29.06849765	-81.28700518
TW A & N-S	155	123	29.0681675	-81.28698958
TW A & N-S	150	107	29.06383726	-81.2871062
TW A & N-S	150	115	29.06603675	-81.28704697
TW A & N-S	150	121	29.06768637	-81.28700254
TW A & N-S	115	101	29.06820694	-81.27763151
TW A & N-S	115	104	29.06760072	-81.27718453
TW A & N-S	115	108	29.06685262	-81.27807739
TW A & N-S	115	114	29.06590427	-81.27931353
TW A & N-S	110	501	29.06108544	-81.28558422
TW A & N-S	110	508	29.06235496	-81.28393709
TW A & N-S	110	515	29.06362447	-81.28228992
TW A & N-S	110	522	29.06489395	-81.28064271
TW A & N-S	106	100	29.06093748	-81.2877282
TW A & N-S	105	102	29.06088364	-81.28710659
TW A & N-S	105	105	29.06108804	-81.28619683

NOTE: GEODETICS REPRESENT DECIMAL DEGREES (NAD 83 FLORIDA STATE PLANES, EAST ZONE, US FOOT). ALL GPS COORDINATES ARE AT THE CENTROID OF THE SAMPLE UNITS.

LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID
- 4105 / AC / 100' x 50' / 5 14 — SECTION NUMBER; PAVEMENT TYPE; TYPICAL SAMPLE UNIT INFORMATION: FLEXIBLE (AC) PAVEMENT LENGTH & WIDTH, RIGID (PCC) PAVEMENT NO. OF SLABS AND SLAB SIZE; NUMBER OF SAMPLE UNITS IN SECTION; NUMBER OF SAMPLE UNITS TO BE INSPECTED
- 605 / AC / 100' x 50' / 1 8 — SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE SYSTEM INVENTORY MAP FOR CONSTRUCTION DATES.
- 100 — INSPECTED SAMPLE UNITS. GPS COORDINATES ARE AT THE CENTROID OF THE SAMPLE UNIT.

TOTAL SAMPLES INSPECTED = 60

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

NUMBER	DATE	REVISIONS

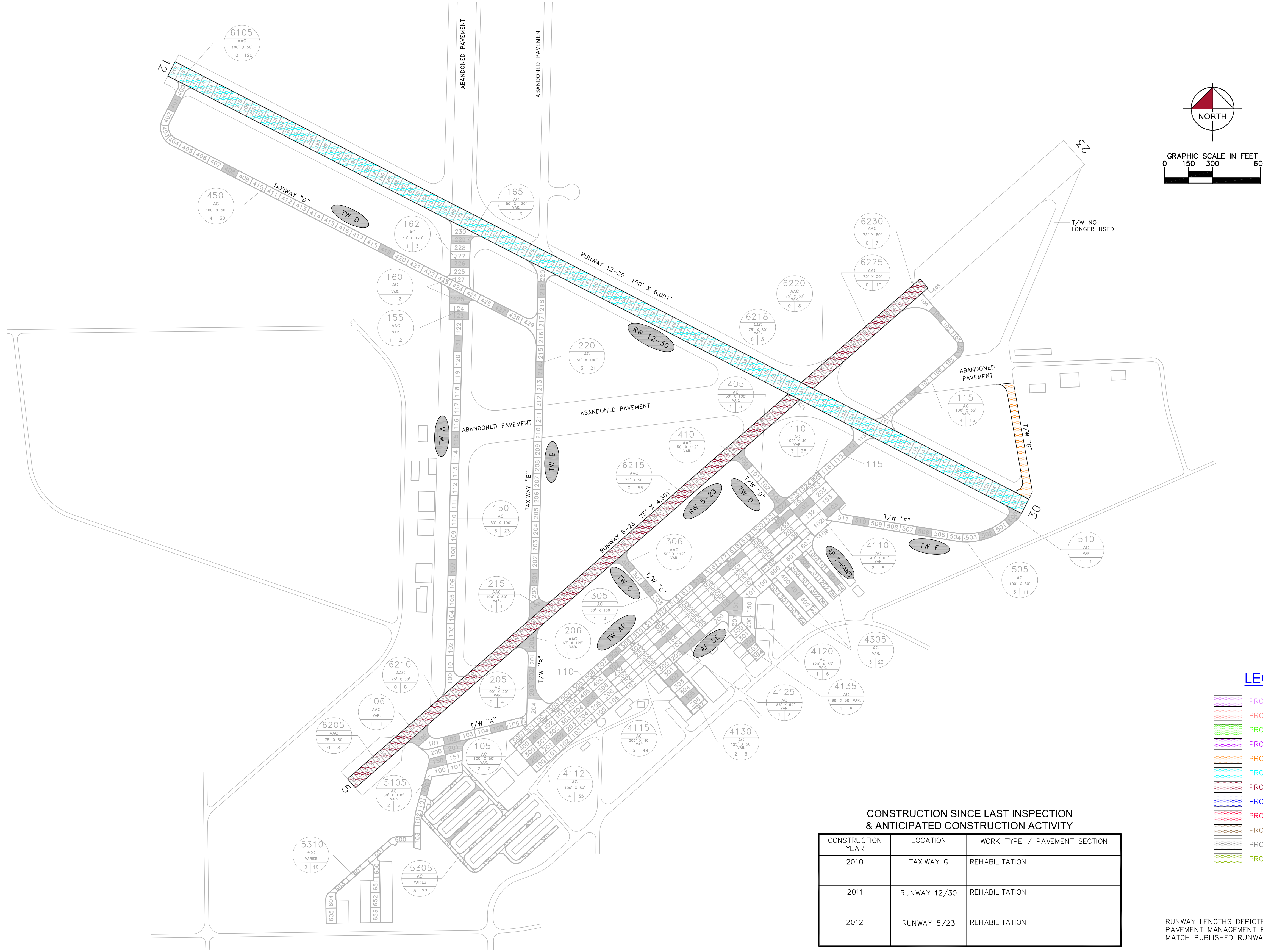
DESIGNED: ELT DRAWN: ALB CHECKED: DRB DATE:

NETWORK DEFINITION MAP

DELAND MUNICIPAL AIRPORT
VOLUSIA COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER: DED
FDOT DISTRICT: 5



LEGEND

- PROJECTS YEAR 2006
- PROJECTS YEAR 2007
- PROJECTS YEAR 2008
- PROJECTS YEAR 2009
- PROJECTS YEAR 2010
- PROJECTS YEAR 2011
- PROJECTS YEAR 2012
- PROJECTS YEAR 2013
- PROJECTS YEAR 2014
- PROJECTS YEAR 2015
- PROJECTS YEAR 2016
- PROJECTS YEAR 2017

CONSTRUCTION SINCE LAST INSPECTION & ANTICIPATED CONSTRUCTION ACTIVITY

CONSTRUCTION YEAR	LOCATION	WORK TYPE / PAVEMENT SECTION
2010	TAXIWAY G	REHABILITATION
2011	RUNWAY 12/30	REHABILITATION
2012	RUNWAY 5/23	REHABILITATION

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

NUMBER	DATE	REVISIONS

DESIGNED: ELT DRAWN: ALB CHECKED: DRB DATE:

SYSTEM INVENTORY MAP

DELAND MUNICIPAL AIRPORT
VOLUSIA COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER **DED**

FDOT DISTRICT 5

Table A-1: Pavement Inventory

Branch Name	Branch ID	Branch Use	Section ID	Length (ft)	Width (ft)	True Area (ft^2)	Section Rank	Surface Type	Last Const. Date	Last Insp. Date	Sample Units in Section
South Apron	AP S	APRON	5105	210	180	41,990.00	P	AC	1/1/1991	3/2/2011	6
South Apron	AP S	APRON	5310	1,230.00	40	53,950.00	P	PCC	7/31/2008	7/31/2008	10
South Apron	AP S	APRON	5305	4,600.00	20	95,270.00	P	AC	7/31/2008	3/2/2011	23
SE Apron	AP SE	APRON	4112	720	220	158,440.00	P	AC	1/1/2001	3/2/2011	35
SE Apron	AP SE	APRON	4110	280	220	65,920.00	P	AC	1/1/2006	3/2/2011	8
SE Apron	AP SE	APRON	4115	1,560.00	220	332,270.00	P	AC	1/1/2006	3/2/2011	48
SE Apron	AP SE	APRON	4120	340	150	47,390.00	P	AC	1/1/2006	3/2/2011	6
SE Apron	AP SE	APRON	4125	450	50	23,890.00	P	AC	1/1/2006	3/2/2011	3
SE Apron	AP SE	APRON	4130	374	115	43,010.00	P	AC	1/1/2006	3/2/2011	8
SE Apron	AP SE	APRON	4135	245	85	20,920.00	P	AC	1/1/2006	3/2/2011	5
Apron T-Hangars	AP T-HANG	APRON	4305	2,430.00	35	95,270.00	P	AC	12/25/1999	3/2/2011	23
Runway 12-30	RW 12-30	RUNWAY	6105	6,000.00	100	600,000.00	P	AAC	1/1/1991	3/2/2011	120
Runway 5-23	RW 5-23	RUNWAY	6215	2,750.00	75	206,250.00	P	AAC	1/1/1996	3/2/2011	55
Runway 5-23	RW 5-23	RUNWAY	6205	400	75	30,000.00	P	AAC	1/1/1997	3/2/2011	8
Runway 5-23	RW 5-23	RUNWAY	6210	400	75	30,000.00	P	AAC	1/1/1997	3/2/2011	8
Runway 5-23	RW 5-23	RUNWAY	6218	125	75	9,390.00	P	AAC	1/1/1997	3/2/2011	3
Runway 5-23	RW 5-23	RUNWAY	6220	165	75	12,530.00	P	AAC	1/1/1997	3/2/2011	3
Runway 5-23	RW 5-23	RUNWAY	6225	485	75	36,375.00	P	AAC	1/1/1997	3/2/2011	10
Runway 5-23	RW 5-23	RUNWAY	6230	319	75	23,925.00	P	AAC	1/1/1997	3/2/2011	7
Taxiway Alpha	TW A & N-S	TAXIWAY	162	150	120	18,030.00	P	AC	1/1/1942	3/2/2011	3
Taxiway Alpha	TW A & N-S	TAXIWAY	165	165	120	20,600.00	P	AC	1/1/1980	3/2/2011	3
Taxiway Parallel AP	TW A & N-S	TAXIWAY	105	670	50	35,620.00	P	AC	1/1/1991	3/2/2011	7
Taxiway Alpha	TW A & N-S	TAXIWAY	150	2,310.00	50	118,970.00	P	AC	1/1/1991	3/2/2011	23

Table A-1: Pavement Inventory (Continued)

Branch Name	Branch ID	Branch Use	Section ID	Length (ft)	Width (ft)	True Area (ft^2)	Section Rank	Surface Type	Last Const. Date	Last Insp. Date	Sample Units in Section
Taxiway Alpha	TW A & N-S	TAXIWAY	155	100	120	12,000.00	P	AAC	1/1/1991	3/2/2011	2
Taxiway Alpha	TW A & N-S	TAXIWAY	160	125	120	15,680.00	P	AC	1/1/1991	3/2/2011	2
Taxiway Parallel AP	TW A & N-S	TAXIWAY	110	2,560.00	40	102,400.00	P	AC	1/1/1992	3/2/2011	26
Taxiway Parallel AP	TW A & N-S	TAXIWAY	106	62	100	7,580.00	P	AAC	1/1/1996	3/2/2011	1
Taxiway Parallel AP	TW A & N-S	TAXIWAY	115	1,125.00	35	47,950.00	P	AC	1/1/1996	3/2/2011	16
Taxiway Bravo	TW B	TAXIWAY	205	410	50	30,660.00	P	AC	1/1/1942	3/2/2011	4
Taxiway Bravo	TW B	TAXIWAY	220	2,100.00	50	107,700.00	P	AC	1/1/1985	3/2/2011	21
Taxiway Bravo	TW B	TAXIWAY	215	70	70	8,190.00	P	AAC	1/1/1996	3/2/2011	1
Taxiway Bravo	TW B	TAXIWAY	206	100	63	9,160.00	P	AAC	1/1/1997	3/2/2011	1
Taxiway Charlie	TW C	TAXIWAY	305	300	50	16,070.00	P	AC	1/1/1991	3/2/2011	3
Taxiway Charlie	TW C	TAXIWAY	306	110	50	6,920.00	P	AAC	1/1/1996	3/2/2011	1
Taxiway Delta	TW D	TAXIWAY	405	300	50	16,300.00	P	AC	1/1/1942	3/2/2011	3
Taxiway Delta	TW D	TAXIWAY	450	3,000.00	50	151,790.00	P	AC	1/1/1991	3/2/2011	30
Taxiway Delta	TW D	TAXIWAY	410	110	50	6,920.00	P	AAC	1/1/1997	3/2/2011	1
Taxiway Echo	TW E	TAXIWAY	505	1,150.00	50	58,070.00	P	AC	1/1/1991	3/2/2011	11
Taxiway Echo	TW E	TAXIWAY	510	90	50	6,050.00	P	AC	1/1/1991	3/2/2011	1

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

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

Work History Report

Pavement Database:

Network: DED **Branch:** AP S (SOUTH APRON) **Section:** 5105 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** APRON **Rank:** P **Length:** 210.00 Ft **Width:** 180.00 Ft **True Area:** 41,990.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT			True	EST 1991 BIT

Network: DED **Branch:** AP S (SOUTH APRON) **Section:** 5305 **Surface:** AC
L.C.D.: 07/31/2008 **Use:** APRON **Rank:** P **Length:** 4,600.00 Ft **Width:** 20.00 Ft **True Area:** 95,270.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
07/31/2008	INITIAL	Initial Construction	$0	0.00	True	

Network: DED **Branch:** AP S (SOUTH APRON) **Section:** 5310 **Surface:** PCC
L.C.D.: 07/31/2008 **Use:** APRON **Rank:** P **Length:** 1,230.00 Ft **Width:** 40.00 Ft **True Area:** 53,950.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
07/31/2008	INITIAL	Initial Construction	$0	0.00	True	

Network: DED **Branch:** AP SE (SE APRON) **Section:** 4110 **Surface:** AC
L.C.D.: 01/01/2006 **Use:** APRON **Rank:** P **Length:** 280.00 Ft **Width:** 220.00 Ft **True Area:** 65,920.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2006	NC-AC	New Construction - AC	$0	0.00	True	
01/01/2001	CR-AC	Complete Reconstruction - AC	$0	4.00	True	4"AC/6"Limerock/12"Stab Subgrade
01/01/1942	IMPORTED	BUILT			True	EST 1942 PCC

Network: DED **Branch:** AP SE (SE APRON) **Section:** 4112 **Surface:** AC
L.C.D.: 01/01/2001 **Use:** APRON **Rank:** P **Length:** 720.00 Ft **Width:** 220.00 Ft **True Area:** 158,440.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2001	CR-AC	Complete Reconstruction - AC	$0	4.00	True	
01/01/1997	IMPORTED	BUILT			True	EST 1997 AC PAVMENT

Network: DED **Branch:** AP SE (SE APRON) **Section:** 4115 **Surface:** AC
L.C.D.: 01/01/2006 **Use:** APRON **Rank:** P **Length:** 1,560.00 Ft **Width:** 220.00 Ft **True Area:** 332,270.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2006	NC-AC	New Construction - AC	$0	0.00	True	
01/04/2001	CR-AC	Complete Reconstruction - AC	$0	4.00	True	4" AC/6" Limerock/12" Stab Subgrade
01/01/1942	IMPORTED	BUILT			True	EST 1942 PCC

Network: DED **Branch:** AP SE (SE APRON) **Section:** 4120 **Surface:** AC
L.C.D.: 01/01/2006 **Use:** APRON **Rank:** P **Length:** 340.00 Ft **Width:** 150.00 Ft **True Area:** 47,390.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2006	NC-AC	New Construction - AC	$0	0.00	True	
01/01/1942	IMPORTED	BUILT			True	EST 1942 PCC

Network: DED **Branch:** AP SE (SE APRON) **Section:** 4125 **Surface:** AC
L.C.D.: 01/01/2006 **Use:** APRON **Rank:** P **Length:** 450.00 Ft **Width:** 50.00 Ft **True Area:** 23,890.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2006	NC-AC	New Construction - AC	$0	0.00	True	
01/01/1942	IMPORTED	BUILT			True	EST 1942 PCC

Network: DED **Branch:** AP SE (SE APRON) **Section:** 4130 **Surface:** AC
L.C.D.: 01/01/2006 **Use:** APRON **Rank:** P **Length:** 374.00 Ft **Width:** 115.00 Ft **True Area:** 43,010.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2006	NC-AC	New Construction - AC	$0	0.00	True	
01/01/1942	IMPORTED	BUILT			True	EST 1942 PCC

Network: DED **Branch:** AP SE (SE APRON) **Section:** 4135 **Surface:** AC
L.C.D.: 01/01/2006 **Use:** APRON **Rank:** P **Length:** 245.00 Ft **Width:** 85.00 Ft **True Area:** 20,920.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2006	NC-AC	New Construction - AC	$0	0.00	True	
12/25/1999	INITIAL	Initial Construction	$0	0.00	True	

Network: DED **Branch:** AP T-HANG (APRON T-HANGARS) **Section:** 4305 **Surface:** AC
L.C.D.: 12/25/1999 **Use:** APRON **Rank:** P **Length:** 2,430.00 Ft **Width:** 35.00 Ft **True Area:** 95,270.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
12/25/1999	INITIAL	Initial Construction	$0	0.00	True	

Network: DED **Branch:** RW 12-30 (RUNWAY 12-30) **Section:** 6105 **Surface:** AAC
L.C.D.: 01/01/1991 **Use:** RUNWAY **Rank:** P **Length:** 6,000.00 Ft **Width:** 100.00 Ft **True Area:** 600,000.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	OVERLAY		1.50	True	1991 1.5" BIT OL 1" LEVELING
01/01/1978	IMPORTED	BUILT			True	1978 P-401 OL

Network: DED **Branch:** RW 5-23 (RUNWAY 5-23) **Section:** 6205 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** RUNWAY **Rank:** P **Length:** 400.00 Ft **Width:** 75.00 Ft **True Area:** 30,000.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	BUILT			True	1997 AC OVERLAY
01/01/1945	IMPORTED	OVERLAY			True	ESTIMATE 1945 AC PAVEMENT

Network: DED **Branch:** RW 5-23 (RUNWAY 5-23) **Section:** 6210 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** RUNWAY **Rank:** P **Length:** 400.00 Ft **Width:** 75.00 Ft **True Area:** 30,000.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	BUILT			True	1997 AC OVERLAY
01/01/1960	IMPORTED	OVERLAY			True	ESTIMATE 1960 AC PAVEMENT

Network: DED **Branch:** RW 5-23 (RUNWAY 5-23) **Section:** 6215 **Surface:** AAC
L.C.D.: 01/01/1996 **Use:** RUNWAY **Rank:** P **Length:** 2,750.00 Ft **Width:** 75.00 Ft **True Area:** 206,250.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1996	IMPORTED	BUILT			True	1996 AC OVERLAY
01/01/1942	IMPORTED	OVERLAY			True	ESTIMATE 1942 AC PAVEMENT

Network: DED **Branch:** RW 5-23 (RUNWAY 5-23) **Section:** 6218 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** RUNWAY **Rank:** P **Length:** 125.00 Ft **Width:** 75.00 Ft **True Area:** 9,390.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	BUILT			True	1997 AC OVERLAY
01/01/1970	IMPORTED	OVERLAY			True	ESTIMATE 1970 AC PAVEMENT

Network: DED **Branch:** RW 5-23 (RUNWAY 5-23) **Section:** 6220 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** RUNWAY **Rank:** P **Length:** 165.00 Ft **Width:** 75.00 Ft **True Area:** 12,530.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	OVERLAY			True	1997 AC OVERLAY
01/01/1991	IMPORTED	BUILT			True	1991 AC OVERLAY

Network: DED **Branch:** RW 5-23 (RUNWAY 5-23) **Section:** 6225 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** RUNWAY **Rank:** P **Length:** 485.00 Ft **Width:** 75.00 Ft **True Area:** 36,375.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	BUILT			True	1997 AC OVERLAY
01/01/1965	IMPORTED	OVERLAY			True	ESTIMATE 1965 AC PAVEMENT

Network: DED **Branch:** RW 5-23 (RUNWAY 5-23) **Section:** 6230 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** RUNWAY **Rank:** P **Length:** 319.00 Ft **Width:** 75.00 Ft **True Area:** 23,925.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	BUILT			True	1997 AC OVERLAY
01/01/1942	IMPORTED	OVERLAY			True	ESTIMATE 1942 AC PAVEMENT

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 105 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 670.00 Ft **Width:** 50.00 Ft **True Area:** 35,620.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT		4.00	True	1991 4" BIT ON 6" RECYCLED BIT

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 106 **Surface:** AAC
L.C.D.: 01/01/1996 **Use:** TAXIWAY **Rank:** P **Length:** 62.00 Ft **Width:** 100.00 Ft **True Area:** 7,580.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1996	IMPORTED	BUILT			True	1996 AC OVERLAY
01/01/1942	IMPORTED	OVERLAY			True	ESTIMATE 1942 AC PAVEMENT

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 110 **Surface:** AC
L.C.D.: 01/01/1992 **Use:** TAXIWAY **Rank:** P **Length:** 2,560.00 Ft **Width:** 40.00 Ft **True Area:** 102,400.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1992	IMPORTED	BUILT			True	ESTIMATE 1992 AC PAVEMENT

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 115 **Surface:** AC
L.C.D.: 01/01/1996 **Use:** TAXIWAY **Rank:** P **Length:** 1,125.00 Ft **Width:** 35.00 Ft **True Area:** 47,950.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1996	IMPORTED	BUILT			True	1996 AC PAVEMENT

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 150 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 2,310.00 Ft **Width:** 50.00 Ft **True Area:** 118,970.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT			True	EST 1991 BIT SECTION UNKNOWN

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 155 **Surface:** AAC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 100.00 Ft **Width:** 120.00 Ft **True Area:** 12,000.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments

01/01/1991	IMPORTED	BUILT			True	1991 P-401 OL ON EXISTING PAVT

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 160 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 125.00 Ft **Width:** 120.00 Ft **True Area:** 15,680.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT		1.50	True	1991 1.5" P-401 6" P-211

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 162 **Surface:** AC
L.C.D.: 01/01/1942 **Use:** TAXIWAY **Rank:** P **Length:** 150.00 Ft **Width:** 120.00 Ft **True Area:** 18,030.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1942	IMPORTED	BUILT			True	EST 1942 BIT

Network: DED **Branch:** TW A & N-S (TAXIWAYS A AND N-S) **Section:** 165 **Surface:** AC
L.C.D.: 01/01/1980 **Use:** TAXIWAY **Rank:** P **Length:** 165.00 Ft **Width:** 120.00 Ft **True Area:** 20,600.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1980	IMPORTED	BUILT			True	EST 1980 BIT

Network: DED **Branch:** TW B (TAXIWAY B) **Section:** 205 **Surface:** AC
L.C.D.: 01/01/1942 **Use:** TAXIWAY **Rank:** P **Length:** 410.00 Ft **Width:** 50.00 Ft **True Area:** 30,660.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1942	IMPORTED	BUILT			True	EST 1942 BIT

Network: DED **Branch:** TW B (TAXIWAY B) **Section:** 206 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** TAXIWAY **Rank:** P **Length:** 100.00 Ft **Width:** 63.00 Ft **True Area:** 9,160.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	BUILT			True	1997 AC OVERLAY
01/01/1942	IMPORTED	OVERLAY			True	ESTIMATE 1942 AC PAVEMENT

Network: DED **Branch:** TW B (TAXIWAY B) **Section:** 215 **Surface:** AAC
L.C.D.: 01/01/1996 **Use:** TAXIWAY **Rank:** P **Length:** 70.00 Ft **Width:** 70.00 Ft **True Area:** 8,190.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1996	IMPORTED	BUILT			True	1996 AC OVERLAY
01/01/1942	IMPORTED	OVERLAY			True	ESTIMATE 1942 AC PAVEMENT

Network: DED **Branch:** TW B (TAXIWAY B) **Section:** 220 **Surface:** AC
L.C.D.: 01/01/1985 **Use:** TAXIWAY **Rank:** P **Length:** 2,100.00 Ft **Width:** 50.00 Ft **True Area:** 107,700.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1985	IMPORTED	BUILT			True	EST 1985 BIT

Network: DED **Branch:** TW C (TAXIWAY C) **Section:** 305 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 300.00 Ft **Width:** 50.00 Ft **True Area:** 16,070.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT		4.00	True	1991 4" P-401 ON RECYCLED BIT

Network: DED **Branch:** TW C (TAXIWAY C) **Section:** 306 **Surface:** AAC
L.C.D.: 01/01/1996 **Use:** TAXIWAY **Rank:** P **Length:** 110.00 Ft **Width:** 50.00 Ft **True Area:** 6,920.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1996	IMPORTED	OVERLAY			True	ORIGINAL AC PAVEMENT

01/01/1996	IMPORTED	BUILT			True	1996 AC OVERLAY

Network: DED **Branch:** TW D (TAXIWAY D) **Section:** 405 **Surface:** AC
L.C.D.: 01/01/1942 **Use:** TAXIWAY **Rank:** P **Length:** 300.00 Ft **Width:** 50.00 Ft **True Area:** 16,300.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1942	IMPORTED	BUILT			True	EST 1942 BIT

Network: DED **Branch:** TW D (TAXIWAY D) **Section:** 410 **Surface:** AAC
L.C.D.: 01/01/1997 **Use:** TAXIWAY **Rank:** P **Length:** 110.00 Ft **Width:** 50.00 Ft **True Area:** 6,920.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1997	IMPORTED	OVERLAY			True	1997 AC OVERLAY
01/01/1942	IMPORTED	BUILT			True	1942 AC PAVEMENT

Network: DED **Branch:** TW D (TAXIWAY D) **Section:** 450 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 3,000.00 Ft **Width:** 50.00 Ft **True Area:** 151,790.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT		4.00	True	1991 4" P-401 6" P-211

Network: DED **Branch:** TW E (TAXIWAY E) **Section:** 505 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 1,150.00 Ft **Width:** 50.00 Ft **True Area:** 58,070.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT		4.00	True	1991 4" P-401 4" RECYCLED BIT

Network: DED **Branch:** TW E (TAXIWAY E) **Section:** 510 **Surface:** AC
L.C.D.: 01/01/1991 **Use:** TAXIWAY **Rank:** P **Length:** 90.00 Ft **Width:** 50.00 Ft **True Area:** 6,050.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/1991	IMPORTED	BUILT		4.00	True	1991 4" P-401 4" RECYCLED BIT

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
BUILT	35	2,458,040.00	3.58	1.02
Complete Reconstruction - AC	3	556,630.00	4.00	.00
Initial Construction	4	265,410.00	.00	.00
New Construction - AC	6	533,400.00	.00	.00
OVERLAY	13	987,240.00	1.50	

STD = Standard Deviation

APPENDIX B

2011 CONDITION MAP
PAVEMENT CONDITION INDEX TABLE

LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID
- PCI 86–100 GOOD
- PCI 71–85 SATISFACTORY
- PCI 56–70 FAIR
- PCI 41–55 POOR
- PCI 26–40 VERY POOR
- PCI 11–25 SERIOUS
- PCI 0–10 FAILED

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

NUMBER	DATE	REVISIONS

DESIGNED: ELT DRAWN: ALB CHECKED: DRB DATE:

2011 CONDITION MAP

DELAND MUNICIPAL AIRPORT
VOLUSIA COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER: DED

FDOT DISTRICT: 5

Table B-1: Pavement Condition Index

Branch Name	Branch ID	Branch Use	Section ID	True Area (ft^2)	Section Rank	Surface Type	Total Samples Inspected	Total Samples	PCI	PCI Category
South Apron	AP S	APRON	5105	41,990.00	P	AC	2	6	73	Satisfactory
South Apron	AP S	APRON	5310	53,950.00	P	PCC	0	10	100	Good
South Apron	AP S	APRON	5305	95,270.00	P	AC	3	23	70	Fair
SE Apron	AP SE	APRON	4112	158,440.00	P	AC	4	35	50	Poor
SE Apron	AP SE	APRON	4110	65,920.00	P	AC	2	8	83	Satisfactory
SE Apron	AP SE	APRON	4115	332,270.00	P	AC	5	48	74	Satisfactory
SE Apron	AP SE	APRON	4120	47,390.00	P	AC	1	6	76	Satisfactory
SE Apron	AP SE	APRON	4125	23,890.00	P	AC	1	3	61	Fair
SE Apron	AP SE	APRON	4130	43,010.00	P	AC	2	8	82	Satisfactory
SE Apron	AP SE	APRON	4135	20,920.00	P	AC	1	5	73	Satisfactory
Apron T-Hangars	AP T-HANG	APRON	4305	95,270.00	P	AC	3	23	67	Fair
Runway 12-30	RW 12-30	RUNWAY	6105	600,000.00	P	AAC	0	120	100	Good
Runway 5-23	RW 5-23	RUNWAY	6215	206,250.00	P	AAC	0	55	100	Good
Runway 5-23	RW 5-23	RUNWAY	6205	30,000.00	P	AAC	0	8	100	Good
Runway 5-23	RW 5-23	RUNWAY	6210	30,000.00	P	AAC	0	8	100	Good
Runway 5-23	RW 5-23	RUNWAY	6218	9,390.00	P	AAC	0	3	100	Good
Runway 5-23	RW 5-23	RUNWAY	6220	12,530.00	P	AAC	0	3	100	Good
Runway 5-23	RW 5-23	RUNWAY	6225	36,375.00	P	AAC	0	10	100	Good
Runway 5-23	RW 5-23	RUNWAY	6230	23,925.00	P	AAC	0	7	100	Good
Taxiway Alpha	TW A & N-S	TAXIWAY	162	18,030.00	P	AC	1	3	38	Very Poor
Taxiway Alpha	TW A & N-S	TAXIWAY	165	20,600.00	P	AC	1	3	36	Very Poor
Taxiway Parallel AP	TW A & N-S	TAXIWAY	105	35,620.00	P	AC	2	7	53	Poor
Taxiway Alpha	TW A & N-S	TAXIWAY	150	118,970.00	P	AC	3	23	24	Serious

Table B-1: Pavement Condition Index (Continued)

Branch Name	Branch ID	Branch Use	Section ID	True Area (ft^2)	Section Rank	Surface Type	Total Samples Inspected	Total Samples	PCI	PCI Category
Taxiway Alpha	TW A & N-S	TAXIWAY	155	12,000.00	P	AAC	1	2	55	Poor
Taxiway Alpha	TW A & N-S	TAXIWAY	160	15,680.00	P	AC	1	2	59	Fair
Taxiway Parallel AP	TW A & N-S	TAXIWAY	110	102,400.00	P	AC	3	26	70	Fair
Taxiway Parallel AP	TW A & N-S	TAXIWAY	106	7,580.00	P	AAC	1	1	69	Fair
Taxiway Parallel AP	TW A & N-S	TAXIWAY	115	47,950.00	P	AC	4	16	69	Fair
Taxiway Bravo	TW B	TAXIWAY	205	30,660.00	P	AC	2	4	62	Fair
Taxiway Bravo	TW B	TAXIWAY	220	107,700.00	P	AC	3	21	69	Fair
Taxiway Bravo	TW B	TAXIWAY	215	8,190.00	P	AAC	1	1	64	Fair
Taxiway Bravo	TW B	TAXIWAY	206	9,160.00	P	AAC	1	1	71	Satisfactory
Taxiway Charlie	TW C	TAXIWAY	305	16,070.00	P	AC	1	3	69	Fair
Taxiway Charlie	TW C	TAXIWAY	306	6,920.00	P	AAC	1	1	71	Satisfactory
Taxiway Delta	TW D	TAXIWAY	405	16,300.00	P	AC	1	3	71	Satisfactory
Taxiway Delta	TW D	TAXIWAY	450	151,790.00	P	AC	4	30	50	Poor
Taxiway Delta	TW D	TAXIWAY	410	6,920.00	P	AAC	1	1	65	Fair
Taxiway Echo	TW E	TAXIWAY	505	58,070.00	P	AC	3	11	71	Satisfactory
Taxiway Echo	TW E	TAXIWAY	510	6,050.00	P	AC	1	1	36	Very Poor

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

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

APPENDIX C

BRANCH CONDITION REPORT
SECTION CONDITION REPORT

Date: 5 /20/2011

Branch Condition Report

Pavement Database: NetworkID: DED

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
AP S (SOUTH APRON)	3	6,040.00	80.00	191,210.00	APRON	81.00	13.49	79.12
AP SE (SE APRON)	7	3,969.00	151.43	691,840.00	APRON	71.29	10.98	69.52
AP T-HANG (APRON T-HANGARS)	1	2,430.00	35.00	95,270.00	APRON	67.00	0.00	67.00
RW 12-30 (RUNWAY 12-30)	1	6,000.00	100.00	600,000.00	RUNWAY	100.00	0.00	100.00
RW 5-23 (RUNWAY 5-23)	7	4,644.00	75.00	348,470.00	RUNWAY	100.00	0.00	100.00
TW A & N-S (TAXIWAYS A AND N-S)	9	7,267.00	83.89	378,830.00	TAXIWAY	52.56	15.61	49.51
TW B (TAXIWAY B)	4	2,680.00	58.25	155,710.00	TAXIWAY	66.50	3.64	67.48
TW C (TAXIWAY C)	2	410.00	50.00	22,990.00	TAXIWAY	70.00	1.00	69.60
TW D (TAXIWAY D)	3	3,410.00	50.00	175,010.00	TAXIWAY	62.00	8.83	52.55
TW E (TAXIWAY E)	2	1,240.00	50.00	64,120.00	TAXIWAY	53.50	17.50	67.70

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	11	978,320.00	73.55	12.19	71.15
RUNWAY	8	948,470.00	100.00	0.00	100.00
TAXIWAY	20	796,660.00	58.60	14.18	55.73
All	39	2,723,450.00	71.31	19.95	76.69

STD = Standard Deviation

Date: 5 /20/2011

Section Condition Report

Pavement Database: *NetworkID: DED*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP S (SOUTH APRON)	5105	01/01/1991	AC	APRON	P	0	41,990.00	03/02/2011	20	73.00
AP S (SOUTH APRON)	5305	07/31/2008	AC	APRON	P	0	95,270.00	03/02/2011	3	70.00
AP S (SOUTH APRON)	5310	07/31/2008	PCC	APRON	P	0	53,950.00	07/31/2008	0	100.00
AP SE (SE APRON)	4110	01/01/2006	AC	APRON	P	0	65,920.00	03/02/2011	5	83.00
AP SE (SE APRON)	4112	01/01/2001	AC	APRON	P	0	158,440.00	03/02/2011	10	50.00
AP SE (SE APRON)	4115	01/01/2006	AC	APRON	P	0	332,270.00	03/02/2011	5	74.00
AP SE (SE APRON)	4120	01/01/2006	AC	APRON	P	0	47,390.00	03/02/2011	5	76.00
AP SE (SE APRON)	4125	01/01/2006	AC	APRON	P	0	23,890.00	03/02/2011	5	61.00
AP SE (SE APRON)	4130	01/01/2006	AC	APRON	P	0	43,010.00	03/02/2011	5	82.00
AP SE (SE APRON)	4135	01/01/2006	AC	APRON	P	0	20,920.00	03/02/2011	5	73.00
AP T-HANG (APRON	4305	12/25/1999	AC	APRON	P	0	95,270.00	03/02/2011	12	67.00
RW 12-30 (RUNWAY 12-30)	6105	01/01/1991	AAC	RUNWAY	P	0	600,000.00	03/02/2011	20	100.00
RW 5-23 (RUNWAY 5-23)	6205	01/01/1997	AAC	RUNWAY	P	0	30,000.00	03/02/2011	14	100.00
RW 5-23 (RUNWAY 5-23)	6210	01/01/1997	AAC	RUNWAY	P	0	30,000.00	03/02/2011	14	100.00
RW 5-23 (RUNWAY 5-23)	6215	01/01/1996	AAC	RUNWAY	P	0	206,250.00	03/02/2011	15	100.00
RW 5-23 (RUNWAY 5-23)	6218	01/01/1997	AAC	RUNWAY	P	0	9,390.00	03/02/2011	14	100.00
RW 5-23 (RUNWAY 5-23)	6220	01/01/1997	AAC	RUNWAY	P	0	12,530.00	03/02/2011	14	100.00
RW 5-23 (RUNWAY 5-23)	6225	01/01/1997	AAC	RUNWAY	P	0	36,375.00	03/02/2011	14	100.00
RW 5-23 (RUNWAY 5-23)	6230	01/01/1997	AAC	RUNWAY	P	0	23,925.00	03/02/2011	14	100.00
TW A & N-S (TAXIWAYS A AND N-S)	105	01/01/1991	AC	TAXIWAY	P	0	35,620.00	03/02/2011	20	53.00
TW A & N-S (TAXIWAYS A AND N-S)	106	01/01/1996	AAC	TAXIWAY	P	0	7,580.00	03/02/2011	15	69.00
TW A & N-S (TAXIWAYS A AND N-S)	110	01/01/1992	AC	TAXIWAY	P	0	102,400.00	03/02/2011	19	70.00
TW A & N-S (TAXIWAYS A AND N-S)	115	01/01/1996	AC	TAXIWAY	P	0	47,950.00	03/02/2011	15	69.00
TW A & N-S (TAXIWAYS A AND N-S)	150	01/01/1991	AC	TAXIWAY	P	0	118,970.00	03/02/2011	20	24.00
TW A & N-S (TAXIWAYS A AND N-S)	155	01/01/1991	AAC	TAXIWAY	P	0	12,000.00	03/02/2011	20	55.00
TW A & N-S (TAXIWAYS A AND N-S)	160	01/01/1991	AC	TAXIWAY	P	0	15,680.00	03/02/2011	20	59.00

Section Condition Report

Pavement Database: *NetworkID: DED*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
TW A & N-S (TAXIWAYS A AND N-S)	162	01/01/1942	AC	TAXIWAY	P	0	18,030.00	03/02/2011	69	38.00
TW A & N-S (TAXIWAYS A AND N-S)	165	01/01/1980	AC	TAXIWAY	P	0	20,600.00	03/02/2011	31	36.00
TW B (TAXIWAY B)	205	01/01/1942	AC	TAXIWAY	P	0	30,660.00	03/02/2011	69	62.00
TW B (TAXIWAY B)	206	01/01/1997	AAC	TAXIWAY	P	0	9,160.00	03/02/2011	14	71.00
TW B (TAXIWAY B)	215	01/01/1996	AAC	TAXIWAY	P	0	8,190.00	03/02/2011	15	64.00
TW B (TAXIWAY B)	220	01/01/1985	AC	TAXIWAY	P	0	107,700.00	03/02/2011	26	69.00
TW C (TAXIWAY C)	305	01/01/1991	AC	TAXIWAY	P	0	16,070.00	03/02/2011	20	69.00
TW C (TAXIWAY C)	306	01/01/1996	AAC	TAXIWAY	P	0	6,920.00	03/02/2011	15	71.00
TW D (TAXIWAY D)	405	01/01/1942	AC	TAXIWAY	P	0	16,300.00	03/02/2011	69	71.00
TW D (TAXIWAY D)	410	01/01/1997	AAC	TAXIWAY	P	0	6,920.00	03/02/2011	14	65.00
TW D (TAXIWAY D)	450	01/01/1991	AC	TAXIWAY	P	0	151,790.00	03/02/2011	20	50.00
TW E (TAXIWAY E)	505	01/01/1991	AC	TAXIWAY	P	0	58,070.00	03/02/2011	20	71.00
TW E (TAXIWAY E)	510	01/01/1991	AC	TAXIWAY	P	0	6,050.00	03/02/2011	20	36.00

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
0-02	0.00	53,950.00	1	100.00	0.00	100.00
03-05	4.71	628,670.00	7	74.14	6.92	74.51
06-10	10.00	158,440.00	1	50.00	0.00	50.00
11-15	14.21	530,460.00	14	84.00	16.10	88.94
16-20	19.91	1,158,640.00	11	60.00	19.35	77.33
26-30	26.00	107,700.00	1	69.00	0.00	69.00
31-35	31.00	20,600.00	1	36.00	0.00	36.00
over 40	69.00	64,990.00	3	57.00	13.93	57.60
All	18.59	2,723,450.00	39	71.31	19.95	76.69

APPENDIX D

PAVEMENT CONDITION PREDICTION TABLE
PREDICTED PCI BY PAVEMENT USE GRAPH

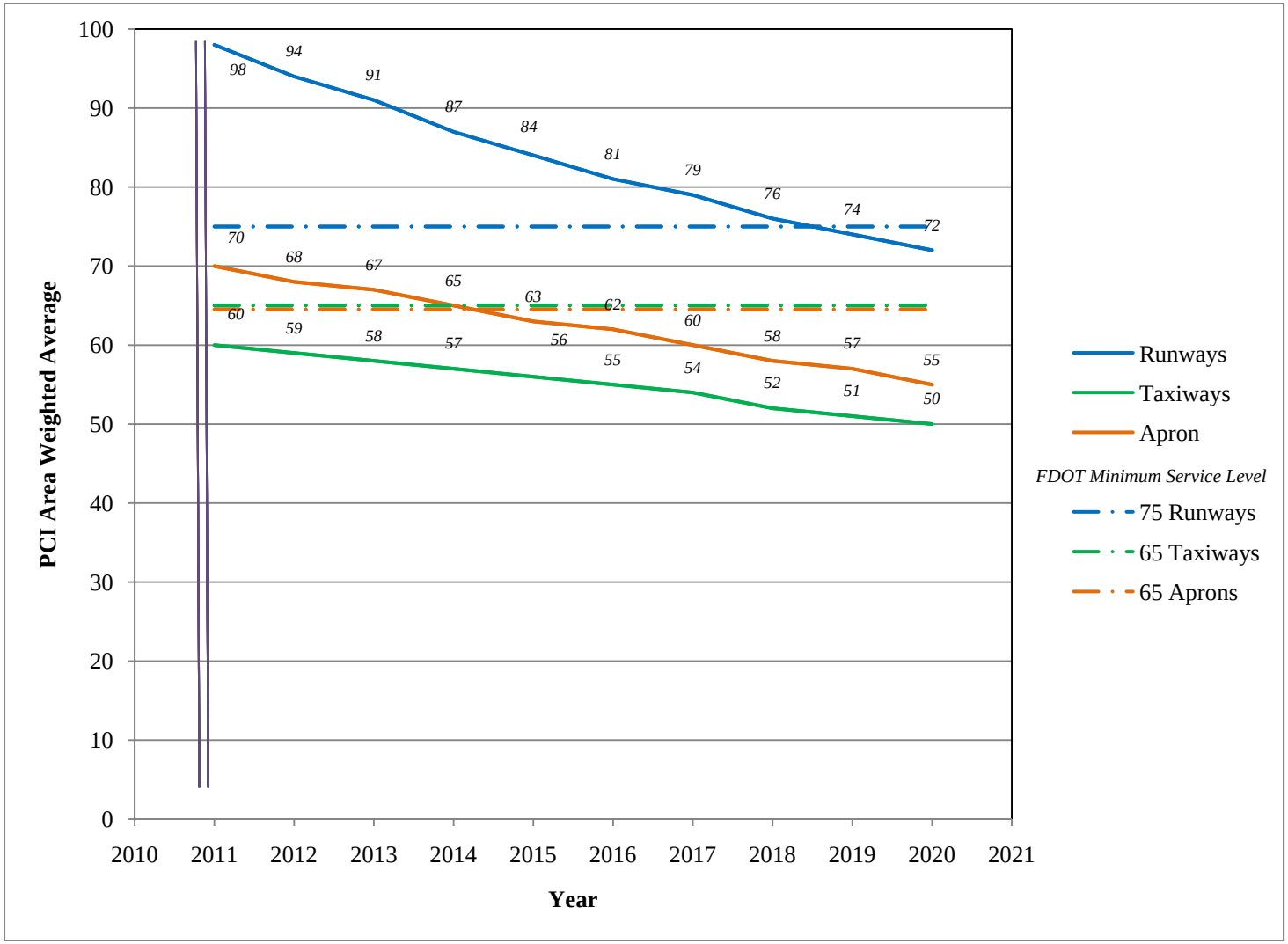
Table D-1: Pavement Condition Prediction

Branch Name	Branch ID	Section ID	Current PCI	PCI Forecast									
				2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
South Apron	AP S	5105	73	73	71	70	69	68	66	65	64	63	62
South Apron	AP S	5305	70	69	66	63	60	57	54	51	48	45	42
South Apron	AP S	5310	100	91	88	85	82	79	76	73	70	67	64
SE Apron	AP SE	4110	83	82	81	79	77	76	75	73	72	71	69
SE Apron	AP SE	4112	50	50	48	47	46	44	43	41	39	38	36
SE Apron	AP SE	4115	74	74	72	71	70	68	67	66	65	64	63
SE Apron	AP SE	4120	76	76	74	73	71	70	69	68	67	65	64
SE Apron	AP SE	4125	61	61	60	59	57	56	55	54	53	52	51
SE Apron	AP SE	4130	82	81	80	78	77	75	74	72	71	70	69
SE Apron	AP SE	4135	73	73	71	70	69	68	66	65	64	63	62
Apron T-Hangars	AP T-HANG	4305	67	67	65	64	63	62	61	60	59	58	57
Runway 12-30	RW 12-30	6105	100	99	95	91	88	85	82	79	77	74	72
Runway 5-23	RW 5-23	6205	100	99	95	91	88	85	82	79	77	74	72
Runway 5-23	RW 5-23	6210	100	99	95	91	88	85	82	79	77	74	72
Runway 5-23	RW 5-23	6215	100	99	95	91	88	85	82	79	77	74	72
Runway 5-23	RW 5-23	6218	100	99	95	91	88	85	82	79	77	74	72
Runway 5-23	RW 5-23	6220	100	99	95	91	88	85	82	79	77	74	72
Runway 5-23	RW 5-23	6225	100	99	95	91	88	85	82	79	77	74	72
Runway 5-23	RW 5-23	6230	100	99	95	91	88	85	82	79	77	74	72
Taxiway Parallel AP	TW A & N-S	105	53	53	52	51	50	48	47	46	45	44	43
Taxiway Parallel AP	TW A & N-S	106	69	69	68	67	67	66	66	65	64	64	63
Taxiway Parallel AP	TW A & N-S	110	70	70	68	67	66	65	64	63	62	61	60
Taxiway Parallel AP	TW A & N-S	115	69	69	67	66	65	64	63	62	61	60	59
Taxiway Alpha	TW A & N-S	150	24	23	21	20	18	16	14	12	10	9	7

Table D-1: Pavement Condition Prediction (Continued)

Branch Name	Branch ID	Section ID	Current PCI	PCI Forecast									
				2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Taxiway Alpha	TW A & N-S	155	55	54	53	51	49	47	46	44	42	40	39
Taxiway Alpha	TW A & N-S	160	59	59	58	57	56	55	54	53	52	51	49
Taxiway Alpha	TW A & N-S	162	38	38	36	35	33	32	30	28	27	25	23
Taxiway Alpha	TW A & N-S	165	36	36	34	33	31	29	28	26	24	22	20
Taxiway Bravo	TW B	205	62	62	61	60	59	58	57	56	55	54	52
Taxiway Bravo	TW B	206	71	71	70	69	68	68	67	66	66	65	65
Taxiway Bravo	TW B	215	64	64	63	62	62	61	60	59	58	56	55
Taxiway Bravo	TW B	220	69	69	67	66	65	64	63	62	61	60	59
Taxiway Charlie	TW C	305	69	69	67	66	65	64	63	62	61	60	59
Taxiway Charlie	TW C	306	71	71	70	69	68	68	67	66	66	65	65
Taxiway Delta	TW D	405	71	71	69	68	67	66	65	64	63	61	60
Taxiway Delta	TW D	410	65	65	64	64	63	62	61	61	60	58	57
Taxiway Delta	TW D	450	50	50	49	47	46	45	44	43	42	40	39
Taxiway Echo	TW E	505	71	71	69	68	67	66	65	64	63	61	60
Taxiway Echo	TW E	510	36	36	34	33	31	29	28	26	24	22	20

Figure D-1: Predicted PCI by Pavement Use



APPENDIX E

YEAR 1 MAINTENANCE ACTIVITIES TABLE

Table E-1: Year 1 Maintenance Activities

Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
South Apron	AP S	5105	WEATH/RAVEL	L	Surface Seal - Rejuvenating	25,982.10	SqFt	$0.40	$10,392.94
South Apron	AP S	5305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	74,666.90	SqFt	$0.40	$29,867.01
South Apron	AP S	5305	WEATH/RAVEL	M	Surface Seal - Coat Tar	1,549.10	SqFt	$0.40	$619.64
SE Apron	AP SE	4110	L & T CR	M	Crack Sealing - AC	945.6	Ft	$2.25	$2,127.62
SE Apron	AP SE	4110	OIL SPILLAGE	N	Patching - AC Shallow	23.1	SqFt	$2.90	$67.06
SE Apron	AP SE	4110	WEATH/RAVEL	L	Surface Seal - Rejuvenating	784.8	SqFt	$0.40	$313.90
SE Apron	AP SE	4115	L & T CR	M	Crack Sealing - AC	467.3	Ft	$2.25	$1,051.40
SE Apron	AP SE	4115	OIL SPILLAGE	N	Patching - AC Shallow	50.5	SqFt	$2.90	$146.35
SE Apron	AP SE	4115	WEATH/RAVEL	L	Surface Seal - Rejuvenating	125,465.90	SqFt	$0.40	$50,186.79
SE Apron	AP SE	4115	WEATH/RAVEL	M	Surface Seal - Coat Tar	55,377.90	SqFt	$0.40	$22,151.33
SE Apron	AP SE	4120	WEATH/RAVEL	L	Surface Seal - Rejuvenating	14,217.00	SqFt	$0.40	$5,686.84
SE Apron	AP SE	4130	WEATH/RAVEL	L	Surface Seal - Rejuvenating	18,980.50	SqFt	$0.40	$7,592.26
SE Apron	AP SE	4135	OIL SPILLAGE	N	Patching - AC Shallow	128.5	SqFt	$2.90	$372.65
SE Apron	AP SE	4135	WEATH/RAVEL	L	Surface Seal - Rejuvenating	16,736.00	SqFt	$0.40	$6,694.46
Apron T-Hangars	AP T-HANG	4305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	72,540.60	SqFt	$0.40	$29,016.46
Apron T-Hangars	AP T-HANG	4305	WEATH/RAVEL	M	Surface Seal - Coat Tar	4,145.10	SqFt	$0.40	$1,658.07
Taxiway Parallel AP	TW A & N-S	106	WEATH/RAVEL	L	Surface Seal - Rejuvenating	4,000.00	SqFt	$0.40	$1,600.01
Taxiway Parallel AP	TW A & N-S	106	L & T CR	M	Crack Sealing - AC	175	Ft	$2.25	$393.76
Taxiway Parallel AP	TW A & N-S	110	WEATH/RAVEL	L	Surface Seal - Rejuvenating	89,600.00	SqFt	$0.40	$35,840.31
Taxiway Parallel AP	TW A & N-S	115	L & T CR	M	Crack Sealing - AC	43	Ft	$2.25	$96.69
Taxiway Parallel AP	TW A & N-S	115	WEATH/RAVEL	L	Surface Seal - Rejuvenating	28,994.00	SqFt	$0.40	$11,597.71
Taxiway Parallel AP	TW A & N-S	115	WEATH/RAVEL	M	Surface Seal - Coat Tar	4,603.20	SqFt	$0.40	$1,841.29
Taxiway Bravo	TW B	206	WEATH/RAVEL	L	Surface Seal - Rejuvenating	7,328.00	SqFt	$0.40	$2,931.22
Taxiway Bravo	TW B	220	WEATH/RAVEL	L	Surface Seal - Rejuvenating	107,699.10	SqFt	$0.40	$43,080.00

Table E-1: Year 1 Maintenance Activities (Continued)

Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
Taxiway Charlie	TW C	305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	16,069.90	SqFt	$0.40	$6,428.00
Taxiway Charlie	TW C	306	WEATH/RAVEL	L	Surface Seal - Rejuvenating	5,536.00	SqFt	$0.40	$2,214.42
Taxiway Delta	TW D	405	WEATH/RAVEL	L	Surface Seal - Rejuvenating	14,261.50	SqFt	$0.40	$5,704.67
Taxiway Delta	TW D	410	L & T CR	M	Crack Sealing - AC	40	Ft	$2.25	$90.00
Taxiway Delta	TW D	410	WEATH/RAVEL	L	Surface Seal - Rejuvenating	6,055.00	SqFt	$0.40	$2,422.02
Taxiway Echo	TW E	505	WEATH/RAVEL	L	Surface Seal - Rejuvenating	46,658.00	SqFt	$0.40	$18,663.37
								Total =	$300,848.25

APPENDIX F

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

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

Year	Branch Name	Section ID	Surface Type	Section Area (ft^2)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2011	SE Apron	4112	AC	158,440	$1,205,729.00	50	Mill and Overlay	100
2011	SE Apron	4125	AC	23,890	$81,273.79	61	Mill and Overlay	100
2011	Taxiway Parallel AP	105	AC	35,620	$229,072.33	53	Mill and Overlay	100
2011	Taxiway Alpha	150	AC	118,970	$2,209,272.75	23	Reconstruction	100
2011	Taxiway Alpha	155	AAC	12,000	$72,456.04	54	Mill and Overlay	100
2011	Taxiway Alpha	160	AC	15,680	$63,864.66	59	Mill and Overlay	100
2011	Taxiway Alpha	162	AC	18,030	$176,730.11	38	Reconstruction	100
2011	Taxiway Alpha	165	AC	20,600	$247,076.43	36	Reconstruction	100
2011	Taxiway B	205	AC	30,660	$95,781.84	62	Mill and Overlay	100
2011	Taxiway B	215	AAC	8,190	$21,031.92	64	Mill and Overlay	100
2011	Taxiway D	450	AC	151,790	$1,155,122.47	50	Mill and Overlay	100
2011	Taxiway E	510	AC	6,050	$72,563.71	36	Reconstruction	100
2012	Taxiway D	410	AAC	6,920	$18,303.68	64	Mill and Overlay	100
2013	Apron T-Hangars	4305	AC	95,270	$259,552.73	64	Mill and Overlay	100
2015	South Apron	5305	AC	95,270	$521,017.28	57	Mill and Overlay	100
2015	Taxiway Parallel AP	115	AC	47,950	$138,590.19	64	Mill and Overlay	100
2015	Taxiway B	220	AC	107,700	$311,286.00	64	Mill and Overlay	100
2015	Taxiway C	305	AC	16,070	$46,447.22	64	Mill and Overlay	100
2016	Taxiway Parallel AP	110	AC	102,400	$304,846.40	64	Mill and Overlay	100
2017	Taxiway D	405	AC	16,300	$49,981.11	64	Mill and Overlay	100
2017	Taxiway E	505	AC	58,070	$178,061.55	64	Mill and Overlay	100
2018	South Apron	5105	AC	41,990	$132,617.68	64	Mill and Overlay	100
2018	SE Apron	4135	AC	20,920	$66,071.97	64	Mill and Overlay	100

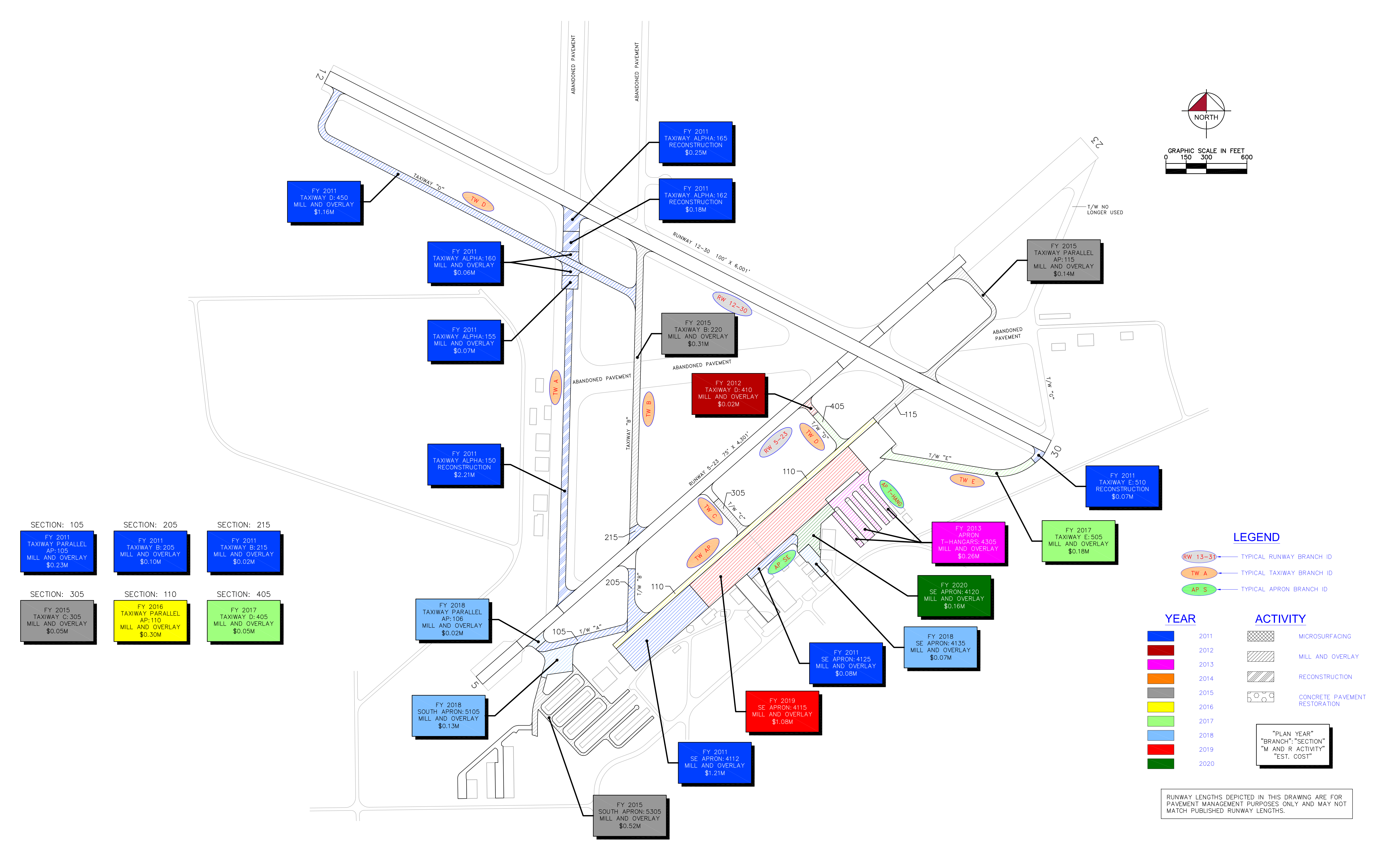
Table F-1: Major M&R Plan by Year under Unlimited Funding Scenario (Continued)

Year	Branch Name	Section ID	Surface Type	Section Area (ft^2)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2018	Taxiway Parallel AP	106	AAC	7,580	$23,940.03	64	Mill and Overlay	100
2019	SE Apron	4115	AC	332,270	$1,080,896.01	64	Mill and Overlay	100
2020	SE Apron	4120	AC	47,390	$158,787.65	64	Mill and Overlay	100
				Total	**$8,920,374.55**	**57**		**100**

* Costs are adjusted for inflation.

APPENDIX G

10-YEAR M&R MAP



NUMBER	DATE	REVISIONS

DESIGNED: ELT DRAWN: ALB CHECKED: DRB DATE:

10-YEAR M & R MAP

DELAND MUNICIPAL AIRPORT
VOLUSIA COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER: DED

FDOT DISTRICT: 5

APPENDIX H

PHOTOGRAPHS

Taxiway Delta, Section 450, Sample Unit 401 – Low and medium severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling, low severity (56) Swell

Taxiway Delta, Section 450, Sample Unit 401 – Low and medium severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling, low severity (56) Swell

Taxiway Alpha, Section 162, Sample Unit 226 – Low severity (43) Block Cracking, medium severity (52) Weathering and Raveling

Taxiway Alpha, Section 162, Sample Unit 226 – Low severity (43) Block Cracking, medium severity (52) Weathering and Raveling

Taxiway Alpha, Section 150, Sample Unit 121 – Medium severity (43) Block Cracking, medium severity (52) Weathering and Raveling

Taxiway Alpha, Section 150, Sample Unit 121 – Medium severity (43) Block Cracking, medium severity (52) Weathering and Raveling

Taxiway Foxtrot, Section 115, Sample Unit 101 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling

Apron, Section 4125, Sample Unit 201 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (50) Patch, low severity (52) Weathering and Raveling

Apron, Section 4115, Sample Unit 302 – Low severity (43) Block Cracking, low and medium severity (48) Longitudinal and Transverse Cracking, medium severity (52) Weathering and Raveling

Apron, Section 4115, Sample Unit 302 – Low severity (43) Block Cracking, low and medium severity (48) Longitudinal and Transverse Cracking, medium severity (52) Weathering and Raveling

APPENDIX I

PCI RE-INSPECTION REPORT

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP S Name: SOUTH APRON Use: APRON Area: 191,210.00SqFt

Section: 5105 of 3 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 41,990.00SqFt Length: 210.00Ft Width: 180.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 6 Surveyed: 2
Conditions: PCI:73.00 |
Inspection Comments: KHA

Sample Number: 150 Type: R Area: 6,800.00SqFt PCI = 72
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	69.00 Ft	Comments:
52	WEATHERING/RAVELING	L	4,500.00 SqFt	Comments:

Sample Number: 201 Type: R Area: 7,745.00SqFt PCI = 74
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	210.00 Ft	Comments:
52	WEATHERING/RAVELING	L	4,500.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP S Name: SOUTH APRON Use: APRON Area: 191,210.00SqFt

Section: 5305 of 3 From: - To: - Last Const.: 7/31/2008
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 95,270.00SqFt Length: 4,600.00Ft Width: 20.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 23 Surveyed: 3
Conditions: PCI:70.00 |
Inspection Comments: KHA

Sample Number: 100 Type: R Area: 4,000.00SqFt PCI = 71
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	50.00	Ft	Comments:
52 WEATHERING/RAVELING	L	3,000.00	SqFt	Comments:

Sample Number: 301 Type: R Area: 4,400.00SqFt PCI = 71
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	40.00	Ft	Comments:
52 WEATHERING/RAVELING	L	3,520.00	SqFt	Comments:

Sample Number: 350 Type: R Area: 3,900.00SqFt PCI = 66
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	28.00	Ft	Comments:
52 WEATHERING/RAVELING	M	200.00	SqFt	Comments:
52 WEATHERING/RAVELING	L	3,120.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP S Name: SOUTH APRON Use: APRON Area: 191,210.00SqFt

Section: 5310 of 3 From: - To: - Last Const.: 7/31/2008
Surface: PCC Family: DEFAULT Zone: Category: Rank: P
Area: 53,950.00SqFt Length: 1,230.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/31/2008 Total Samples: 0 Surveyed: 0
Conditions: PCI:100.00 |
Inspection Comments: Construction/Major M&R inspection record.

Sample Number: Type: Area: 0.00
<NO SAMPLE RECORDS>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP SE Name: SE APRON Use: APRON Area: 691,840.00SqFt

Section: 4110 of 7 From: - To: - Last Const.: 1/1/2006
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 65,920.00SqFt Length: 280.00Ft Width: 220.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 8 Surveyed: 2
Conditions: PCI:83.00 |
Inspection Comments: KHA

Sample Number: 103 Type: R Area: 8,400.00SqFt PCI = 79
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	M	181.00	Ft	Comments:
49 OIL SPILLAGE	N	2.00	SqFt	Comments:
52 WEATHERING/RAVELING	L	100.00	SqFt	Comments:

Sample Number: 202 Type: R Area: 8,400.00SqFt PCI = 87
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	M	60.00	Ft	Comments:
52 WEATHERING/RAVELING	L	100.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP SE Name: SE APRON Use: APRON Area: 691,840.00SqFt

Section: 4112 of 7 From: - To: - Last Const.: 1/1/2001
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 158,440.00SqFt Length: 720.00Ft Width: 220.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 35 Surveyed: 4
Conditions: PCI:50.00 |
Inspection Comments: KHA

Sample Number: 200 Type: R Area: 5,000.00SqFt PCI = 61
Sample Comments:

43 BLOCK CRACKING	L	80.00	SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	154.00	Ft	Comments:
52 WEATHERING/RAVELING	M	600.00	SqFt	Comments:
52 WEATHERING/RAVELING	L	3,900.00	SqFt	Comments:

Sample Number: 202 Type: R Area: 5,000.00SqFt PCI = 69
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	415.00	Ft	Comments:
52 WEATHERING/RAVELING	L	4,999.96	SqFt	Comments:

Sample Number: 305 Type: R Area: 5,000.00SqFt PCI = 30
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	136.00	Ft	Comments:
49 OIL SPILLAGE	N	24.00	SqFt	Comments:
43 BLOCK CRACKING	L	3,230.00	SqFt	Comments:
52 WEATHERING/RAVELING	M	4,999.96	SqFt	Comments:

Sample Number: 401 Type: R Area: 5,000.00SqFt PCI = 38
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	244.00	Ft	Comments:
43 BLOCK CRACKING	L	2,259.00	SqFt	Comments:
52 WEATHERING/RAVELING	M	4,000.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP SE Name: SE APRON Use: APRON Area: 691,840.00SqFt

Section: 4115 of 7 From: - To: - Last Const.: 1/1/2006
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 332,270.00SqFt Length: 1,560.00Ft Width: 220.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 48 Surveyed: 5
Conditions: PCI:74.00 |
Inspection Comments: KHA

Sample Number: 106 Type: R Area: 8,000.00SqFt PCI = 67
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	220.00	Ft	Comments:
50 PATCHING	L	24.00	SqFt	Comments:
52 WEATHERING/RAVELING	L	7,999.93	SqFt	Comments:

Sample Number: 204 Type: R Area: 8,000.00SqFt PCI = 74
Sample Comments:

50 PATCHING	L	16.00	SqFt	Comments:
52 WEATHERING/RAVELING	L	6,400.00	SqFt	Comments:

Sample Number: 302 Type: R Area: 6,400.00SqFt PCI = 28
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	260.00	Ft	Comments:
43 BLOCK CRACKING	L	3,767.00	SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	54.00	Ft	Comments:
52 WEATHERING/RAVELING	M	6,399.95	SqFt	Comments:

Sample Number: 307 Type: R Area: 8,000.00SqFt PCI = 96
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	31.00	Ft	Comments:

Sample Number: 309 Type: R Area: 8,000.00SqFt PCI = 95
Sample Comments:

52 WEATHERING/RAVELING	L	100.00	SqFt	Comments:
49 OIL SPILLAGE	N	3.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP SE Name: SE APRON Use: APRON Area: 691,840.00SqFt

Section: 4120 of 7 From: - To: - Last Const.: 1/1/2006
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 47,390.00SqFt Length: 340.00Ft Width: 150.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 6 Surveyed: 1
Conditions: PCI:76.00 |
Inspection Comments: KHA

Sample Number: 151 Type: R Area: 9,790.00SqFt PCI = 76
Sample Comments:

50	PATCHING	L	576.00 SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	2.00 Ft	Comments:
52	WEATHERING/RAVELING	L	2,937.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP SE Name: SE APRON Use: APRON Area: 691,840.00SqFt

Section: 4125 of 7 From: - To: - Last Const.: 1/1/2006
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 23,890.00SqFt Length: 450.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 3 Surveyed: 1
Conditions: PCI:61.00 |
Inspection Comments: KHA

Sample Number: 201 Type: R Area: 9,250.00SqFt PCI = 61
Sample Comments:

50 PATCHING	L	448.00	SqFt	Comments:
50 PATCHING	M	60.00	SqFt	Comments:
52 WEATHERING/RAVELING	L	7,400.00	SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	132.00	Ft	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP SE Name: SE APRON Use: APRON Area: 691,840.00SqFt

Section: 4130 of 7 From: - To: - Last Const.: 1/1/2006
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 43,010.00SqFt Length: 374.00Ft Width: 115.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 8 Surveyed: 2
Conditions: PCI:82.00 |
Inspection Comments: KHA

Sample Number: 302 Type: R Area: 5,750.00SqFt PCI = 90
Sample Comments:

52	WEATHERING/RAVELING	L	575.00 SqFt	Comments:

Sample Number: 305 Type: R Area: 5,750.00SqFt PCI = 73
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	3.00 Ft	Comments:
52	WEATHERING/RAVELING	L	4,500.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP SE Name: SE APRON Use: APRON Area: 691,840.00SqFt

Section: 4135 of 7 From: - To: - Last Const.: 1/1/2006
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 20,920.00SqFt Length: 245.00Ft Width: 85.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 5 Surveyed: 1
Conditions: PCI:73.00 |
Inspection Comments: KHA

Sample Number: 302 Type: R Area: 4,330.00SqFt PCI = 73
Sample Comments:

49	OIL SPILLAGE	N	18.00 SqFt	Comments:
52	WEATHERING/RAVELING	L	3,464.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: AP T-HANG Name: APRON T-HANGARS Use: APRON Area: 95,270.00SqFt

Section: 4305 of 1 From: - To: - Last Const.: 12/25/199
Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P
Area: 95,270.00SqFt Length: 2,430.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 23 Surveyed: 3
Conditions: PCI:67.00 |
Inspection Comments: KHA

Sample Number: 102 Type: R Area: 3,500.00SqFt PCI = 72
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	9.00 Ft	Comments:
52	WEATHERING/RAVELING	L	3,000.00 SqFt	Comments:

Sample Number: 200 Type: R Area: 3,290.00SqFt PCI = 73
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	8.00 Ft	Comments:
52	WEATHERING/RAVELING	L	2,500.00 SqFt	Comments:

Sample Number: 401 Type: R Area: 7,000.00SqFt PCI = 62
Sample Comments:

52	WEATHERING/RAVELING	M	600.00 SqFt	Comments:
52	WEATHERING/RAVELING	L	5,000.00 SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	161.00 Ft	Comments:
43	BLOCK CRACKING	L	200.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 12-30 Name: RUNWAY 12-30 Use: RUNWAY Area: 600,000.00SqFt

Section: 6105 of 1 From: - To: - Last Const.: 1/1/1991
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 600,000.00SqFt Length: 6,000.00Ft Width: 100.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 150 Surveyed: 20
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 103 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 107 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 114 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 121 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 128 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 133 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 138 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 144 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 149 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 159 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 164 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Sample Number: 170 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 173 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 177 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 184 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 191 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 198 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 205 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 212 Type: R Area: 5,000.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 219 Type: R Area: 7,500.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 5-23 Name: RUNWAY 5-23 Use: RUNWAY Area: 348,470.00SqFt

Section: 6205 of 7 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 30,000.00SqFt Length: 400.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 10 Surveyed: 2
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 102 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 106 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 5-23 Name: RUNWAY 5-23 Use: RUNWAY Area: 348,470.00SqFt

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Section: 6210 of 7 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 30,000.00SqFt Length: 400.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 10 Surveyed: 1
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 110 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 5-23 Name: RUNWAY 5-23 Use: RUNWAY Area: 348,470.00SqFt

Section: 6215 of 7 From: - To: - Last Const.: 1/1/1996
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 206,250.00SqFt Length: 2,750.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 70 Surveyed: 1
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 117 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 5-23 Name: RUNWAY 5-23 Use: RUNWAY Area: 348,470.00SqFt

Section: 6218 of 7 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 9,390.00SqFt Length: 125.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 3 Surveyed: 1
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 172 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 5-23 Name: RUNWAY 5-23 Use: RUNWAY Area: 348,470.00SqFt

Section: 6220 of 7 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 12,530.00SqFt Length: 165.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 4 Surveyed: 1
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 177 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 5-23 Name: RUNWAY 5-23 Use: RUNWAY Area: 348,470.00SqFt

Section: 6225 of 7 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 36,375.00SqFt Length: 485.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 12 Surveyed: 2
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 181 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 185 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: RW 5-23 Name: RUNWAY 5-23 Use: RUNWAY Area: 348,470.00SqFt

Section: 6230 of 7 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P
Area: 23,925.00SqFt Length: 319.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 1 Surveyed: 1
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 190 Type: R Area: 3,750.00SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 105 of 9 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 35,620.00SqFt Length: 670.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 7 Surveyed: 2
Conditions: PCI:53.00 |
Inspection Comments: KHA

Sample Number: 102 Type: R Area: 5,000.00SqFt PCI = 61
Sample Comments:

52 WEATHERING/RAVELING	L	3,500.00	SqFt	Comments:
52 WEATHERING/RAVELING	M	1,500.00	SqFt	Comments:

Sample Number: 105 Type: R Area: 5,000.00SqFt PCI = 46
Sample Comments:

52 WEATHERING/RAVELING	M	4,500.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 106 of 9 From: - To: - Last Const.: 1/1/1996
Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P
Area: 7,580.00SqFt Length: 62.00Ft Width: 100.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 1 Surveyed: 1
Conditions: PCI:69.00 |
Inspection Comments: KHA

Sample Number: 100 Type: R Area: 7,580.00SqFt PCI = 69
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	M	175.00	Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	295.00	Ft	Comments:
52	WEATHERING/RAVELING	L	4,000.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 110 of 9 From: - To: - Last Const.: 1/1/1992
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 102,400.00SqFt Length: 2,560.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 26 Surveyed: 3
Conditions: PCI:70.00 |
Inspection Comments: KHA

Sample Number: 508 Type: R Area: 4,000.00SqFt PCI = 70
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	317.00	Ft	Comments:
52 WEATHERING/RAVELING	L	3,500.00	SqFt	Comments:

Sample Number: 515 Type: R Area: 4,000.00SqFt PCI = 70
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	91.00	Ft	Comments:
52 WEATHERING/RAVELING	L	3,500.00	SqFt	Comments:

Sample Number: 522 Type: R Area: 4,000.00SqFt PCI = 70
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	200.00	Ft	Comments:
52 WEATHERING/RAVELING	L	3,500.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 115 of 9 From: - To: - Last Const.: 1/1/1996
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 47,950.00SqFt Length: 1,125.00Ft Width: 35.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 16 Surveyed: 4
Conditions: PCI:69.00 |
Inspection Comments: KHA

Sample Number: 101 Type: R Area: 3,615.00SqFt PCI = 70
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	140.00	Ft	Comments:
52 WEATHERING/RAVELING	L	3,254.00	SqFt	Comments:

Sample Number: 104 Type: R Area: 3,420.00SqFt PCI = 45
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	M	14.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	120.00	Ft	Comments:
52 WEATHERING/RAVELING	L	2,394.00	SqFt	Comments:
52 WEATHERING/RAVELING	M	1,500.00	SqFt	Comments:

Sample Number: 108 Type: R Area: 3,500.00SqFt PCI = 71
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	147.00	Ft	Comments:
52 WEATHERING/RAVELING	L	2,800.00	SqFt	Comments:

Sample Number: 114 Type: R Area: 5,090.00SqFt PCI = 83
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	10.00	Ft	Comments:
52 WEATHERING/RAVELING	L	1,000.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 150 of 9 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 118,970.00SqFt Length: 2,310.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 23 Surveyed: 3
Conditions: PCI:24.00 |
Inspection Comments: KHA

Sample Number: 107 Type: R Area: 5,000.00SqFt PCI = 25
Sample Comments:

43 BLOCK CRACKING	M	4,999.96 SqFt	Comments:
52 WEATHERING/RAVELING	M	4,999.96 SqFt	Comments:

Sample Number: 115 Type: R Area: 5,000.00SqFt PCI = 25
Sample Comments:

52 WEATHERING/RAVELING	M	4,999.96 SqFt	Comments:
43 BLOCK CRACKING	M	4,999.96 SqFt	Comments:

Sample Number: 121 Type: R Area: 5,000.00SqFt PCI = 22
Sample Comments:

43 BLOCK CRACKING	M	4,999.96 SqFt	Comments:
52 WEATHERING/RAVELING	M	4,928.00 SqFt	Comments:
52 WEATHERING/RAVELING	H	72.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 155 of 9 From: - To: - Last Const.: 1/1/1991
Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P
Area: 12,000.00SqFt Length: 100.00Ft Width: 120.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 2 Surveyed: 1
Conditions: PCI:55.00 |
Inspection Comments: KHA

Sample Number: 123 Type: R Area: 6,000.00SqFt PCI = 55
Sample Comments:

43	BLOCK CRACKING	L	4,188.00 SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	16.00 Ft	Comments:
52	WEATHERING/RAVELING	M	100.00 SqFt	Comments:
52	WEATHERING/RAVELING	L	4,800.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 160 of 9 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 15,680.00SqFt Length: 125.00Ft Width: 120.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 2 Surveyed: 1
Conditions: PCI:59.00 |
Inspection Comments: KHA

Sample Number: 125 Type: R Area: 8,855.00SqFt PCI = 59
Sample Comments:

43 BLOCK CRACKING	L	2,340.00	SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	86.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	51.00	Ft	Comments:
52 WEATHERING/RAVELING	L	8,854.93	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 162 of 9 From: - To: - Last Const.: 1/1/1942
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 18,030.00SqFt Length: 150.00Ft Width: 120.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 3 Surveyed: 1
Conditions: PCI:38.00 |
Inspection Comments: KHA

Sample Number: 226 Type: R Area: 6,000.00SqFt PCI = 38
Sample Comments:

43 BLOCK CRACKING	L	4,400.00 SqFt	Comments:
52 WEATHERING/RAVELING	M	5,999.95 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW A & N-S Name: TAXIWAYS A AND N-S Use: TAXIWAY Area: 378,830.00SqFt

Section: 165 of 9 From: - To: - Last Const.: 1/1/1980
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 20,600.00SqFt Length: 165.00Ft Width: 120.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 3 Surveyed: 1
Conditions: PCI:36.00 |
Inspection Comments: KHA

Sample Number: 229 Type: R Area: 6,600.00SqFt PCI = 36
Sample Comments:

43	BLOCK CRACKING	M	840.00	SqFt	Comments:
43	BLOCK CRACKING	L	875.00	SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	297.00	Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	130.00	Ft	Comments:
52	WEATHERING/RAVELING	L	5,000.00	SqFt	Comments:
52	WEATHERING/RAVELING	M	1,340.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 155,710.00SqFt

Section: 205 of 4 From: - To: - Last Const.: 1/1/1942
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 30,660.00SqFt Length: 410.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 4 Surveyed: 2
Conditions: PCI:62.00 |
Inspection Comments: KHA

Sample Number: 202 Type: R Area: 5,000.00SqFt PCI = 64
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	235.00	Ft	Comments:
52	WEATHERING/RAVELING	L	4,999.96	SqFt	Comments:
50	PATCHING	L	200.00	SqFt	Comments:

Sample Number: 203 Type: R Area: 6,230.00SqFt PCI = 61
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	230.00	Ft	Comments:
52	WEATHERING/RAVELING	M	1,188.00	SqFt	Comments:
52	WEATHERING/RAVELING	L	5,042.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 155,710.00SqFt

Section: 206 of 4 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P
Area: 9,160.00SqFt Length: 100.00Ft Width: 63.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 1 Surveyed: 1
Conditions: PCI:71.00 |
Inspection Comments: KHA

Sample Number: 200 Type: R Area: 9,160.00SqFt PCI = 71
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	556.00 Ft	Comments:
52	WEATHERING/RAVELING	L	7,328.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 155,710.00SqFt

Section: 215 of 4 From: - To: - Last Const.: 1/1/1996
Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P
Area: 8,190.00SqFt Length: 70.00Ft Width: 70.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 1 Surveyed: 1
Conditions: PCI:64.00 |
Inspection Comments: KHA

Sample Number: 199 Type: R Area: 8,190.00SqFt PCI = 64
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	M	125.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	466.00 Ft	Comments:
52	WEATHERING/RAVELING	L	8,189.93 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 155,710.00SqFt

Section: 220 of 4 From: - To: - Last Const.: 1/1/1985
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 107,700.00SqFt Length: 2,100.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 21 Surveyed: 3
Conditions: PCI:69.00 |
Inspection Comments: KHA

Sample Number: 201 Type: R Area: 5,000.00SqFt PCI = 69
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	143.00	Ft	Comments:
52 WEATHERING/RAVELING	L	4,999.96	SqFt	Comments:

Sample Number: 214 Type: R Area: 5,000.00SqFt PCI = 69
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	386.00	Ft	Comments:
52 WEATHERING/RAVELING	L	4,999.96	SqFt	Comments:

Sample Number: 219 Type: R Area: 5,000.00SqFt PCI = 69
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING	L	304.00	Ft	Comments:
52 WEATHERING/RAVELING	L	4,999.96	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW C Name: TAXIWAY C Use: TAXIWAY Area: 22,990.00SqFt

Section: 305 of 2 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 16,070.00SqFt Length: 300.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 3 Surveyed: 1
Conditions: PCI:69.00 |
Inspection Comments: KHA

Sample Number: 302 Type: R Area: 5,000.00SqFt PCI = 69
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	138.00 Ft	Comments:
52	WEATHERING/RAVELING	L	4,999.96 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW C Name: TAXIWAY C Use: TAXIWAY Area: 22,990.00SqFt

Section: 306 of 2 From: - To: - Last Const.: 1/1/1996
Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P
Area: 6,920.00SqFt Length: 110.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 1 Surveyed: 1
Conditions: PCI:71.00 |
Inspection Comments: KHA

Sample Number: 300 Type: R Area: 6,920.00SqFt PCI = 71
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	324.08 Ft	Comments:
52	WEATHERING/RAVELING	L	5,536.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW D Name: TAXIWAY D Use: TAXIWAY Area: 175,010.00SqFt

Section: 405 of 3 From: - To: - Last Const.: 1/1/1942
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 16,300.00SqFt Length: 300.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 3 Surveyed: 1
Conditions: PCI:71.00 |
Inspection Comments: KHA

Sample Number: 103 Type: R Area: 6,325.00SqFt PCI = 71
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	20.00 Ft	Comments:
52	WEATHERING/RAVELING	L	5,534.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW D Name: TAXIWAY D Use: TAXIWAY Area: 175,010.00SqFt

Section: 410 of 3 From: - To: - Last Const.: 1/1/1997
Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P
Area: 6,920.00SqFt Length: 110.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 1 Surveyed: 1
Conditions: PCI:65.00 |
Inspection Comments: KHA

Sample Number: 100 Type: R Area: 6,920.00SqFt PCI = 65
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	M	40.00	Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	278.00	Ft	Comments:
52	WEATHERING/RAVELING	L	6,055.00	SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW D Name: TAXIWAY D Use: TAXIWAY Area: 175,010.00SqFt

Section: 450 of 3 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 151,790.00SqFt Length: 3,000.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 30 Surveyed: 4
Conditions: PCI:50.00 |
Inspection Comments: KHA

Sample Number: 401 Type: R Area: 5,000.00SqFt PCI = 52
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	523.00 Ft	Comments:
52	WEATHERING/RAVELING	L	4,500.00 SqFt	Comments:
44	CORRUGATION	L	300.00 SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	20.00 Ft	Comments:

Sample Number: 408 Type: R Area: 5,000.00SqFt PCI = 51
Sample Comments:

52	WEATHERING/RAVELING	L	4,999.96 SqFt	Comments:
43	BLOCK CRACKING	L	1,600.00 SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	100.00 Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	193.00 Ft	Comments:

Sample Number: 419 Type: R Area: 5,000.00SqFt PCI = 49
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	504.00 Ft	Comments:
52	WEATHERING/RAVELING	L	2,500.00 SqFt	Comments:
52	WEATHERING/RAVELING	M	2,000.00 SqFt	Comments:

Sample Number: 427 Type: R Area: 5,000.00SqFt PCI = 47
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	355.00 Ft	Comments:
43	BLOCK CRACKING	L	900.00 SqFt	Comments:
52	WEATHERING/RAVELING	M	2,000.00 SqFt	Comments:
52	WEATHERING/RAVELING	L	2,500.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW E Name: TAXIWAY E Use: TAXIWAY Area: 64,120.00SqFt

Section: 505 of 2 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 58,070.00SqFt Length: 1,150.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 11 Surveyed: 3
Conditions: PCI:71.00 |
Inspection Comments: KHA

Sample Number: 502 Type: R Area: 4,935.00SqFt PCI = 70
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	103.00 Ft	Comments:
52	WEATHERING/RAVELING	L	4,500.00 SqFt	Comments:

Sample Number: 506 Type: R Area: 5,000.00SqFt PCI = 69
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	39.00 Ft	Comments:
52	WEATHERING/RAVELING	L	4,999.96 SqFt	Comments:

Sample Number: 510 Type: R Area: 5,000.00SqFt PCI = 75
Sample Comments:

48	LONGITUDINAL/TRANSVERSE CRACKING	L	206.00 Ft	Comments:
52	WEATHERING/RAVELING	L	2,500.00 SqFt	Comments:

Re-inspection Report

FDOT
Report Generated Date: 5/20/2011
Site Name:

Network: DED Name: DELAND MUNICIPAL AIRPORT

Branch: TW E Name: TAXIWAY E Use: TAXIWAY Area: 64,120.00SqFt

Section: 510 of 2 From: - To: - Last Const.: 1/1/1991
Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P
Area: 6,050.00SqFt Length: 90.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 3/2/2011 Total Samples: 1 Surveyed: 1
Conditions: PCI:36.00 |
Inspection Comments: KHA

Sample Number: 500 Type: R Area: 6,050.00SqFt PCI = 36
Sample Comments:

50	PATCHING	M	50.00	SqFt	Comments:
52	WEATHERING/RAVELING	M	1,800.00	SqFt	Comments:
52	WEATHERING/RAVELING	L	2,000.00	SqFt	Comments:
43	BLOCK CRACKING	L	1,200.00	SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	23.00	Ft	Comments:
43	BLOCK CRACKING	M	30.00	SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	190.00	Ft	Comments: