

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
AVIATION OFFICE**

**Statewide Airfield Pavement
Management Program**

**Homestead General Aviation Airport– X51
(General Aviation)
Miami, Florida
(District 6)**



May 2012

TABLE OF CONTENTS

| | PAGE NO. |
|--|-----------------|
| Executive Summary | iii |
| 1. Introduction..... | 1 |
| 2. Network Definition and Pavement Inventory | 10 |
| 3. Pavement Condition..... | 14 |
| 4. Pavement Condition Prediction | 20 |
| 5. Maintenance Policies and costs | 21 |
| 6. Pavement Rehabilitation Needs Analysis | 27 |
| 7. Maintenance and Rehabilitation Plan | 32 |
| 8. Visual Aids..... | 33 |
| 9. Recommendations..... | 34 |

LIST OF FIGURES

| | |
|--|----|
| Figure 1-1: Pavement Life Cycle..... | 4 |
| Figure 1-2: PCI Rating Scale | 6 |
| Figure 2-1: Pavement Area by Surface Type..... | 12 |
| Figure 3-1: Network PCI Distribution by Rating Category | 17 |
| Figure 3-1a: Condition Rating Summary..... | 17 |
| Figure 3-2: Percentage of Pavement Area within Each PCI Range by Pavement Use..... | 18 |
| Figure 4-1: Predicted PCI by Pavement Use | 20 |
| Figure 6-1: Budget Scenario Analysis | 31 |

LIST OF TABLES

| | |
|---|----|
| Table I: Condition Summary by Branch..... | iv |
| Table II: Condition Summary by Pavement Use | iv |
| Table III: Condition Summary by Pavement Rank..... | v |
| Table IV: Immediate Major M&R Needs | v |
| Table V: 10-Year M&R Costs under Unlimited Funding Scenario | vi |
| Table 1-1: Sampling Rate for FDOT Condition Surveys | 5 |
| Table 2-1: Construction Since Last Inspection & Anticipated Construction Activity | 11 |
| Table 2-2: Pavement Area by Pavement Use | 11 |
| Table 2-3: Branch and Section Inventory | 13 |
| Table 3-1: Pavement Distresses for Asphalt Concrete Surfaces..... | 14 |
| Table 3-2: Pavement Distresses for Portland Cement Concrete Surfaces | 15 |
| Table 3-3: Condition by Pavement Use | 17 |
| Table 5-1: Routine Maintenance Activities for Airfield Pavements | 22 |
| Table 5-2: Critical PCI for General Aviation Airports | 23 |
| Table 5-3: FDOT Minimum Service Level PCI for General Aviation Airports..... | 23 |
| Table 5-4: M&R Activities for General Aviation Airports | 24 |
| Table 5-5: Maintenance Unit Costs for FDOT | 25 |
| Table 5-6: M&R Activities and Unit Costs by Condition for General Aviation Airports... | 26 |
| Table 6-1: Summary of Immediate Major M&R Needs Option No. 1 | 27 |

TABLE OF CONTENTS

| | PAGE NO. |
|--|-----------------|
| Table 6-2: Summary of Immediate Major M&R Needs Option No. 2 | 28 |
| Table 6-3: Summary of Year 1 Maintenance Activities | 29 |
| Table 6-3: Summary of Year 1 Maintenance Activities (Continued)..... | 30 |
| Table 7-1: M&R Costs under Unlimited Funding Scenario | 32 |

APPENDICES

| | |
|------------|---|
| Appendix A | Network Definition Map |
| | System Inventory Map |
| | Pavement Inventory Table |
| | Work History Report |
| Appendix B | 2012 Condition Map |
| | Pavement Condition Index Table |
| Appendix C | Branch Condition Report |
| | Section Condition Report |
| Appendix D | Pavement Condition Prediction Table |
| | Predicted PCI by Pavement Use Graph |
| Appendix E | Year 1 Maintenance Activities Table |
| Appendix F | Major M&R Plan by Year under Unlimited Funding Scenario Table |
| Appendix G | 10-Year M&R Map |
| Appendix H | Photographs |
| Appendix I | PCI Re-inspection Report |

EXECUTIVE SUMMARY

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

The tasks required to achieve this objective at Homestead General Aviation 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 Homestead General Aviation Airport, and
- Provide the estimated costs associated with the suggested immediate and future M&R activities

During April 2012, the PCI survey was performed at Homestead General Aviation Airport. The results of the survey indicate that, based on a numerical scale of 0 to 100, the overall area-weighted average PCI of the airfield pavements in 2012 is 74, 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 | Area Weighted PCI Range | Condition Rating | FDOT Minimum Service Level | MicroPAVER Minimum PCI | Action Required |
|--------------------|--------------------------|--------------------------------|-------------------------|-----------------------------------|-------------------------------|------------------------|
| North Apron | 81 | 81 | Satisfactory | 60 | 65 | |
| Northwest Apron | 68 | 68 | Fair | 60 | 65 | |
| Runway 10-28 | 79 | 79 | Satisfactory | 75 | 65 | |
| Runway 18-36 | 81 | 69 - 94 | Satisfactory | 75 | 65 | |
| Taxiway Alpha | 73 | 56 - 88 | Satisfactory | 65 | 65 | X |
| Taxiway A-1 | 70 | 66 - 79 | Fair | 65 | 65 | |
| Taxiway A-2 | 66 | 66 | Fair | 65 | 65 | |
| Taxiway A-3 | 68 | 61 - 85 | Fair | 65 | 65 | X |
| Taxiway Bravo | 69 | 69 - 84 | Fair | 65 | 65 | |
| Taxiway B-1 | 76 | 76 | Satisfactory | 65 | 65 | |
| Taxiway B-2 | 43 | 43 | Poor | 65 | 65 | X |
| Taxiway B-3 | 39 | 39 | Very Poor | 65 | 65 | X |
| Taxiway B-4 | 40 | 40 | Very Poor | 65 | 65 | X |
| Taxiway B-5 | 84 | 60 - 100 | Satisfactory | 65 | 65 | X |

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 | 80 | Satisfactory |
| Taxiway | 68 | Fair |
| Apron | 71 | Satisfactory |
| All (Weighted) | 74 | Satisfactory |

Table III: Condition Summary by Pavement Rank

| Rank* | Average Area-Weighted PCI | Condition Rating |
|-----------------------|---------------------------|---------------------|
| Primary | 74 | Satisfactory |
| All (Weighted) | 74 | 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 Homestead General Aviation Airport, include: Taxiway Alpha, Taxiway A-2, Taxiway B-2, Taxiway B-3, Taxiway B-4, and Taxiway B-5. These pavement sections exhibited distresses which justify mill and overlay rehabilitation or full pavement reconstruction. The immediate needs are summarized in Table IV below.

Table IV: Immediate Major M&R Needs

| 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 |
|---------------|------------|--------------|---------------------------------|---------------------|----------------|------------------|---------------|
| Taxiway Alpha | 160 | AC | 14,699 | \$34,219.32 | 64 | Mill and Overlay | 100 |
| Taxiway Alpha | 260 | AC | 5,369 | \$15,430.92 | 62 | Mill and Overlay | 100 |
| Taxiway Alpha | 295 | AC | 4,189 | \$19,136.00 | 56 | Mill and Overlay | 100 |
| Taxiway A-3 | 250 | AC | 6,135 | \$19,305.51 | 61 | Mill and Overlay | 100 |
| Taxiway B-2 | 120 | AC | 21,223 | \$133,494.82 | 43 | Mill and Overlay | 100 |
| Taxiway B-3 | 130 | AC | 12,237 | \$85,942.43 | 39 | Reconstruction | 100 |
| Taxiway B-4 | 140 | AC | 15,569 | \$97,928.84 | 40 | Mill and Overlay | 100 |
| Taxiway B-5 | 150 | AC | 6,211 | \$21,241.53 | 60 | Mill and Overlay | 100 |
| | | | | \$426,699.37 | 53 | | 100 |

* Costs are adjusted for inflation.

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

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

| Year | Preventative | Major M&R | Total Year Cost |
|--------------|-----------------------|-----------------------|------------------------|
| 2012 | \$253,422.07 | \$426,699.36 | \$680,121.43 |
| 2013 | \$228,914.20 | \$75,518.68 | \$304,432.88 |
| 2014 | \$251,694.64 | \$0.00 | \$251,694.64 |
| 2015 | \$91,588.93 | \$1,911,085.24 | \$2,002,674.17 |
| 2016 | \$104,444.93 | \$0.00 | \$104,444.93 |
| 2017 | \$123,407.78 | \$0.00 | \$123,407.78 |
| 2018 | \$105,068.66 | \$320,420.03 | \$425,488.69 |
| 2019 | \$118,143.41 | \$64,690.22 | \$182,833.63 |
| 2020 | \$134,059.65 | \$2,806.54 | \$136,866.19 |
| 2021 | \$151,130.62 | \$23,062.30 | \$174,192.92 |
| Total | \$1,561,874.89 | \$2,824,282.37 | \$4,386,157.26 |

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 74 in 2012 to 83 in 2021. Appendix F lists the Major M&R for the 10-Year program. Appendix G graphically depicts the program activity.

It is important to note that although preventative and some major M&R activities would have to be conducted over several years, the area-weighted PCI value for all Homestead General Aviation Airport pavements in 2021 may remain near 74. 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 Homestead General Aviation 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.floridairportpavement.com) was created for the input of data under secure procedures.

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

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

1.3 Organization

1.3.1 Aviation Office Program Manager Role

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

1.3.2 Consultant Role

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

1.3.3 Airport Role

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

1.4 Pavement Types and Pavement Management

1.4.1 Pavement basics

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

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

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

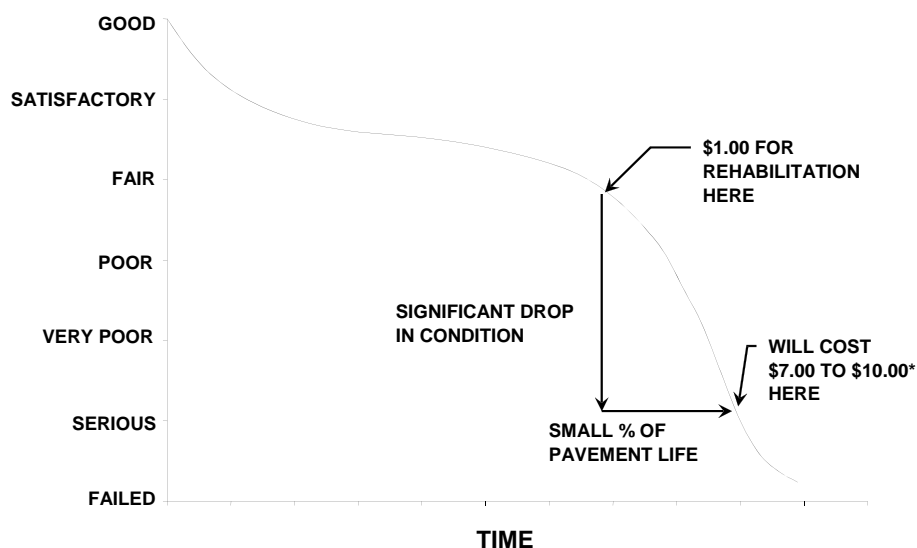
A small percentage of the airport pavements in Florida are composed of asphalt concrete surface over Portland Cement Concrete (APC). This pavement type is known as “composite” pavement.

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

1.4.2 Pavement Management System Concept

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

Figure 1-1: Pavement Life Cycle



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

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

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

1.4.3 Pavement Inspection Methodology for the SAPMP

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

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

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

Sample unit sizes are approximately 5000 ± 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 nonrepresentative 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 $5,000 \pm 2,000$ 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

Homestead General Aviation Airport (X51) is located three miles northwest of the City of Homestead, in Miami-Dade County, Florida. It is owned by Miami-Dade County and operated by the Miami-Dade Aviation Department. The Airport is served by two paved runways. Runway 18-36 is 100-ft wide by 3,999-ft long. Runway 10-28 is 75-ft wide by 3,000-ft long. There is also a turf runway on the north side of the airport. Runway 18-36 is served by parallel Taxiway Bravo and its connectors. Runway 10-28 is served by parallel Taxiway Alpha and its connectors. There are two aprons at the Airport, one south of Taxiway Alpha, the other southeast of the Taxiways Alpha and Bravo intersection. This Airport is designated as a General Aviation airport and is located in District 6 of the Florida Department of Transportation.

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

Homestead General Aviation Airport was purchased by Miami-Dade County in 1963. The Airport is close to several points of interest including Everglades National Park, Homestead/Miami Speedway, and the Florida Keys. Airport operations include two FBO's, skydive and glider operators, fuel facilities, and flight training.

2.1 Network Definition

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

2.1.1 Branch Section Identification

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

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

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

2.1.2 System Inventory and Network Definition Update

The System Inventory and Network Definition drawings are used to identify changes in the network since the most recent update from the 2006/2008 inspections and also to plan the field inspection activities for the 2012 survey. Prior to the field inspection process, the System Inventory drawing was updated from the previous inspection with notes indicating recent construction projects on the various Sections of pavement throughout the airfield. This System Inventory drawing is used to update the Network Definition drawing.

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

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

The updated System Inventory and Network Definition drawings for Homestead General Aviation 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 |
|--------------------------|---------------------------------------|---|
| 2009 | Taxiway B-5 Connector at Runway 18-36 | Asphalt Pavement Rehabilitation |
| 2009 | Runway 18-36 | Mill and Overlay of center 50' with P-401 Asphalt |

2.2 Pavement Inventory

The detailed pavement inventory was updated to reflect the network definition update and field inspection results. The total number of sample units designated to be inspected at the airport is 66 sample units.

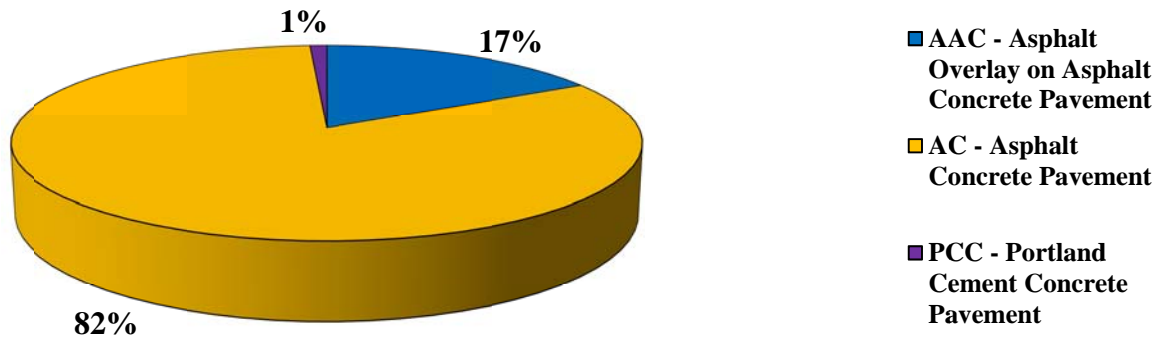
The total airfield pavement area in 2012 at Homestead General Aviation Airport is 1,498,606 square feet. The breakdown of pavement area for each pavement use is provided in Table 2-2.

Table 2-2: Pavement Area by Pavement Use

| Use | Area (ft²) | % of Total Area |
|-----------------------|------------------------------|------------------------|
| Runway | 624,825 | 42% |
| Taxiway | 505,735 | 34% |
| Apron | 368,046 | 25% |
| All (Weighted) | 1,498,606 | 100% |

Figure 2-1 presents the breakdown of the pavement area at Homestead General Aviation Airport by surface type.

Figure 2-1: Pavement Area by Surface Type



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

Table 2-3: Branch and Section Inventory

| Branch Name | Branch ID | Section ID | True Area (ft²) | Section Rank | Surface Type | Last Const. Date | Total Samples Inspected | Total Samples |
|--------------------|------------------|-------------------|-----------------------------------|---------------------|---------------------|-------------------------|--------------------------------|----------------------|
| North Apron | AP N | 4205 | 85,048 | P | AC | 1/1/2001 | 3 | 25 |
| NW Apron | AP NW | 4105 | 282,998 | P | AC | 1/1/2001 | 6 | 59 |
| Runway 10-28 | RW 10-28 | 6205 | 224,925 | P | AC | 1/1/1962 | 12 | 60 |
| Runway 18-36 | RW 18-36 | 6105 | 199,950 | P | AAC | 1/1/2001 | 8 | 40 |
| Runway 18-36 | RW 18-36 | 6110 | 199,950 | P | AC | 1/1/2001 | 7 | 40 |
| Taxiway Alpha | TW A | 160 | 14,699 | P | AC | 1/1/2001 | 1 | 4 |
| Taxiway Alpha | TW A | 205 | 13,738 | P | AC | 1/1/1967 | 1 | 3 |
| Taxiway Alpha | TW A | 210 | 6,800 | P | AAC | 1/1/1994 | 1 | 2 |
| Taxiway Alpha | TW A | 215 | 111,200 | P | AC | 1/1/1962 | 4 | 28 |
| Taxiway Alpha | TW A | 220 | 14,799 | P | AAC | 1/1/1994 | 1 | 3 |
| Taxiway Alpha | TW A | 260 | 5,369 | P | AC | 1/1/2001 | 1 | 1 |
| Taxiway Alpha | TW A | 270 | 5,369 | P | AC | 1/1/2001 | 1 | 1 |
| Taxiway Alpha | TW A | 280 | 4,273 | P | AC | 1/1/2001 | 1 | 1 |
| Taxiway Alpha | TW A | 290 | 4,069 | P | AC | 1/1/2001 | 1 | 1 |
| Taxiway Alpha | TW A | 295 | 4,189 | P | AC | 1/1/1970 | 1 | 1 |
| Taxiway A-1 | TW A1 | 230 | 6,236 | P | AC | 1/1/1962 | 1 | 1 |
| Taxiway A-1 | TW A1 | 235 | 2,971 | P | AAC | 1/1/1994 | 1 | 1 |
| Taxiway A-2 | TW A2 | 240 | 11,520 | P | AC | 1/1/1962 | 1 | 2 |
| Taxiway A-3 | TW A3 | 250 | 6,135 | P | AC | 1/1/1962 | 1 | 1 |
| Taxiway A-3 | TW A3 | 255 | 2,869 | P | AAC | 1/1/1994 | 1 | 1 |
| Taxiway Bravo | TW B | 105 | 192,408 | P | AC | 1/1/2001 | 4 | 39 |
| Taxiway Bravo | TW B | 180 | 12,661 | P | AC | 1/1/2001 | 1 | 3 |
| Taxiway Bravo | TW B | 185 | 852 | P | PCC | 1/1/2001 | 1 | 1 |
| Taxiway B-1 | TW B1 | 110 | 20,223 | P | AAC | 1/1/2001 | 1 | 5 |
| Taxiway B-2 | TW B2 | 120 | 21,223 | P | AC | 1/1/2001 | 1 | 4 |
| Taxiway B-3 | TW B3 | 130 | 12,237 | P | AC | 1/1/2001 | 1 | 3 |
| Taxiway B-4 | TW B4 | 140 | 15,569 | P | AC | 1/1/1967 | 1 | 3 |
| Taxiway B-5 | TW B5 | 150 | 6,211 | P | AC | 1/1/2001 | 1 | 2 |
| Taxiway B-5 | TW B5 | 155 | 10,114 | P | AAC | 1/1/2009 | 1 | 2 |

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

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

3. PAVEMENT CONDITION

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

3.1 Inspection Methodology

A PCI survey is performed by measuring the amount and severity of pavement distresses, which are caused by traffic load, climate, and other factors, observed within a sample unit. This data is imported into MicroPAVER, which calculates PCI values for the pavement sections. Tables 3-1 and 3-2 below list the pavement distress types and related causes for asphalt concrete (AC) and Portland Cement Concrete (PCC), respectively.

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 |
| <i>Source: U.S. Army CERL, FDOT Airfield Inspection Reference Manual</i> | | |

Table 3-2: Pavement Distresses for Portland Cement Concrete Surfaces

| Code | Distress | Mechanism |
|------|-------------------------|-----------------------------|
| 61 | Blow-up | Climate |
| 62 | Corner Break | Load |
| 63 | Linear Cracking | Load |
| 64 | Durability Cracking | Climate |
| 65 | Joint Seal Damage | Climate |
| 66 | Small Patch | Pavement Repair |
| 67 | Large Patch/Utility Cut | Utility / Pavement Repair |
| 68 | Popout | Climate |
| 69 | Pumping | Load |
| 70 | Scaling/Crazing | Construction Quality |
| 71 | Faulting | Subgrade Quality |
| 72 | Shattered Slab | Load |
| 73 | Shrinkage Cracking | Construction Quality / Load |
| 74 | Joint Spalling | Load |
| 75 | Corner Spalling | Load |

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 Homestead General Aviation Airport were performed in April 2012. Data was recorded in the field in accordance with FAA Advisory Circular 150/5380-6B “Guidelines and Procedures for Maintenance of Airport Pavements” and ASTM D 5340 “Standard Test Method for Airport Pavement Condition Index Surveys” (2004).

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

3.2 Pavement Condition Index Results

According to the 2012 survey, the overall area-weighted PCI at Homestead General Aviation Airport is 74, representing a Satisfactory overall network condition.

The Airport exhibited overall pavement distresses associated with climate and age. Typical asphalt concrete pavement distresses include: weathering and raveling, longitudinal and transverse cracking, and patching. Portland cement concrete (PCC) distresses include joint spalling and joint seal damage.

Runway 18-36 pavements were divided into keel and outboard sections. The keel section was overlaid in the past five years and is in Good condition. The outboard section is much older and is in Fair condition. The overall runway PCI is 81, with a condition rating of Satisfactory.

Runway 18-36 pavements exhibited distresses associated with climate and age. Distresses include low, medium, and high severity weathering and raveling; low severity longitudinal and transverse cracking; and medium severity patching.

Runway 10-28 has a PCI of 79 with a condition rating of Satisfactory. The runway pavements exhibited distresses associated with climate and age. Distresses include low severity longitudinal and transverse cracking; low severity patching; and low, medium, and high severity weathering and raveling. These are climate and age related distresses.

Taxiway Bravo is in Fair condition with a PCI of 69. Asphalt concrete pavement distresses include low severity longitudinal and transverse cracking and low severity weathering and raveling. Portland cement concrete distresses include low severity joint spalling and low severity joint seal damage. These are climate, age, and load related distresses.

The Taxiway Bravo connectors range from Very Poor to Good condition. Taxiways B-2, B-3, and B-4 exhibited the most severe distresses. Distresses for these taxiways include low severity longitudinal and transverse cracking; low, medium, and high severity weathering and raveling; and low severity patching. Medium and high severity weathering and raveling were more prevalent on these taxiways than other areas of the Airport. These are climate and age related distresses.

Taxiway Alpha is in Fair to Good condition with an overall PCI of 73. Distresses include low and medium severity patching, low severity longitudinal and transverse cracking, low and medium severity weathering and raveling, low severity block cracking and low severity depression. These are climate, age, and subgrade quality related distresses.

The Taxiway Alpha connectors are in Fair condition. Distresses include low severity alligator cracking, low severity patching, low severity longitudinal and transverse cracking, low and medium severity weathering and raveling, low severity block cracking and low severity depression. These are climate, age, subgrade quality, and load related distresses.

The North and Northwest Aprons were in Fair to Satisfactory condition. The North Apron has a PCI of 81. The Northwest Apron has a PCI of 68. Distresses include low severity longitudinal and transverse cracking; low and high severity weathering and raveling; low severity patching; oil spillage; and low severity block cracking. These are climate, age, and aircraft related distresses.

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 Homestead General Aviation Airport.

Figure 3-1: Network PCI Distribution by Rating Category

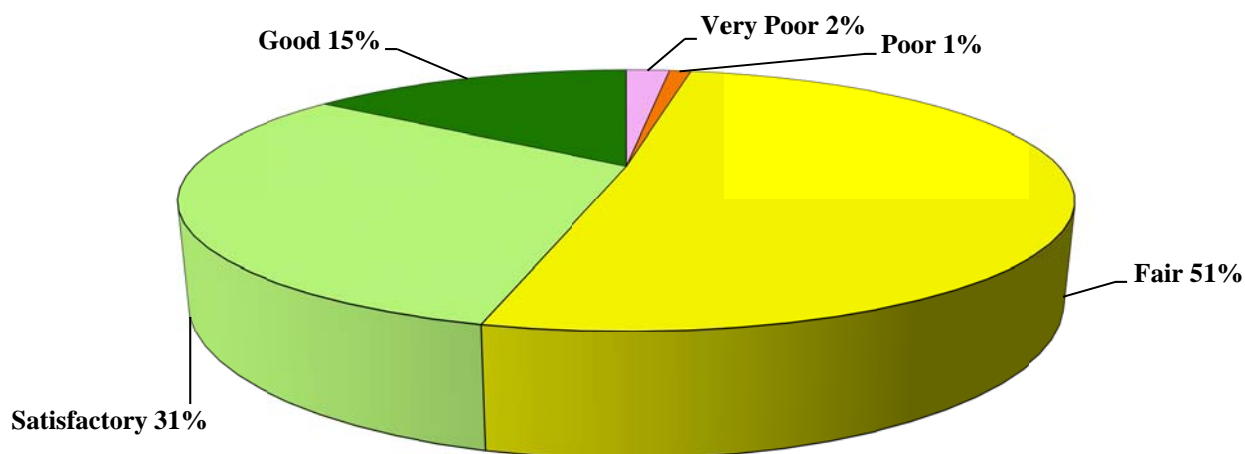


Figure 3-1a: Condition Rating Summary

| Condition Rating | Total Area (ft ²) | Percent |
|------------------|-------------------------------|---------|
| Good | 224,864 | 15% |
| Satisfactory | 463,230 | 31% |
| Fair | 761,484 | 51% |
| Poor | 21,223 | 1% |
| Very Poor | 27,806 | 2% |
| Serious | 0 | 0% |
| Failed | 0 | 0% |

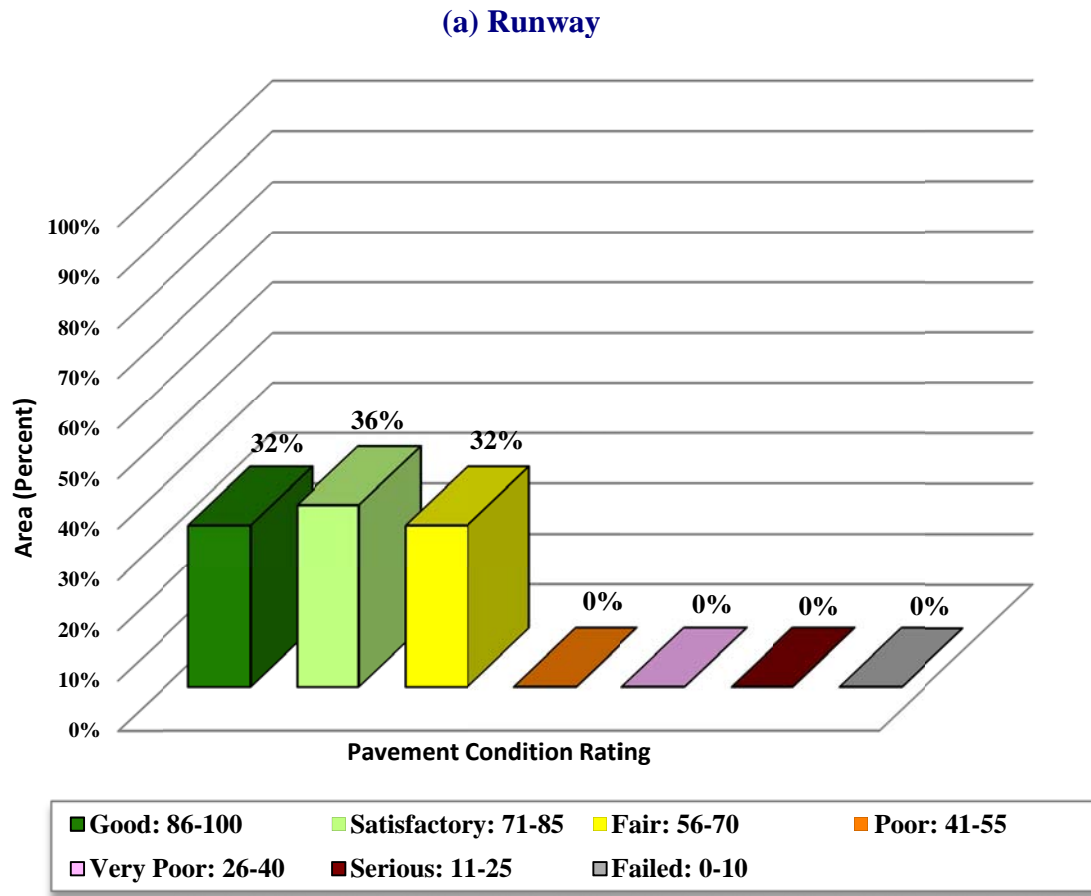
Approximately 46% of the network is in Good and Satisfactory condition while 3% of the network is in Poor and Very Poor condition. Table 3-3 illustrates the area-weighted PCI computed individually for each pavement use.

Table 3-3: Condition by Pavement Use

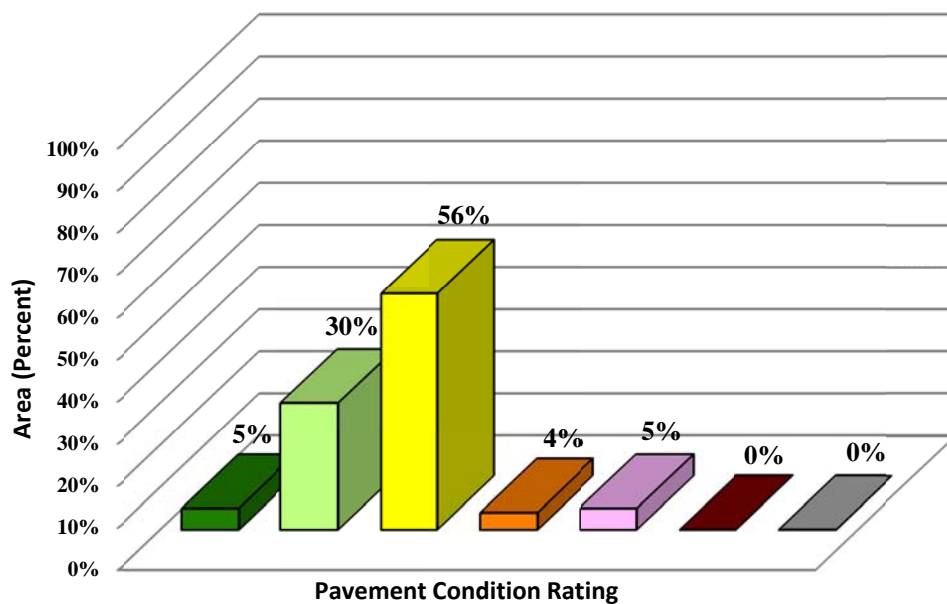
| Use | Average Area-Weighted PCI | Condition Rating |
|-----------------------|---------------------------|---------------------|
| Runway | 80 | Satisfactory |
| Taxiway | 68 | Fair |
| Apron | 71 | Satisfactory |
| All (Weighted) | 74 | Satisfactory |

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

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

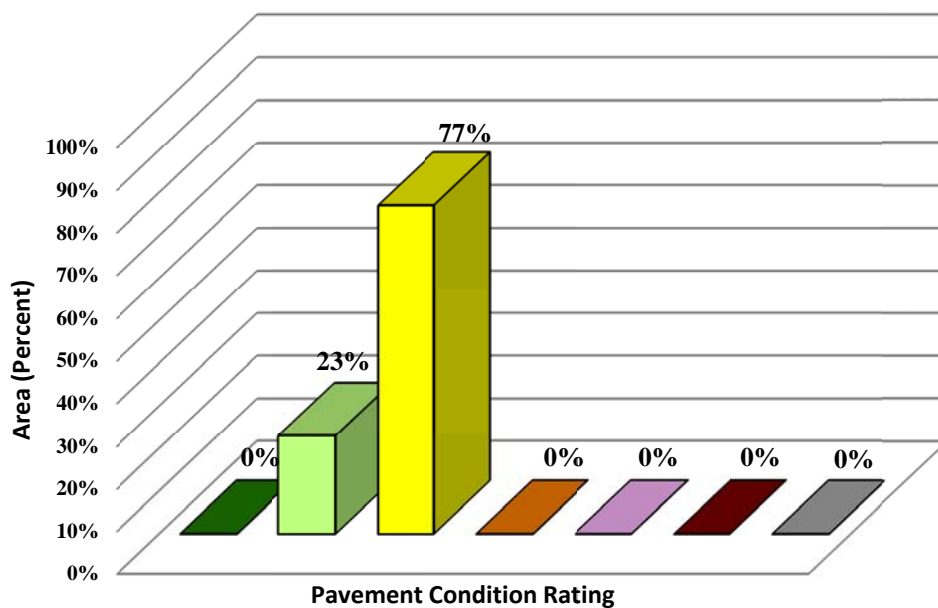


(b) Taxiway



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

(c) Apron

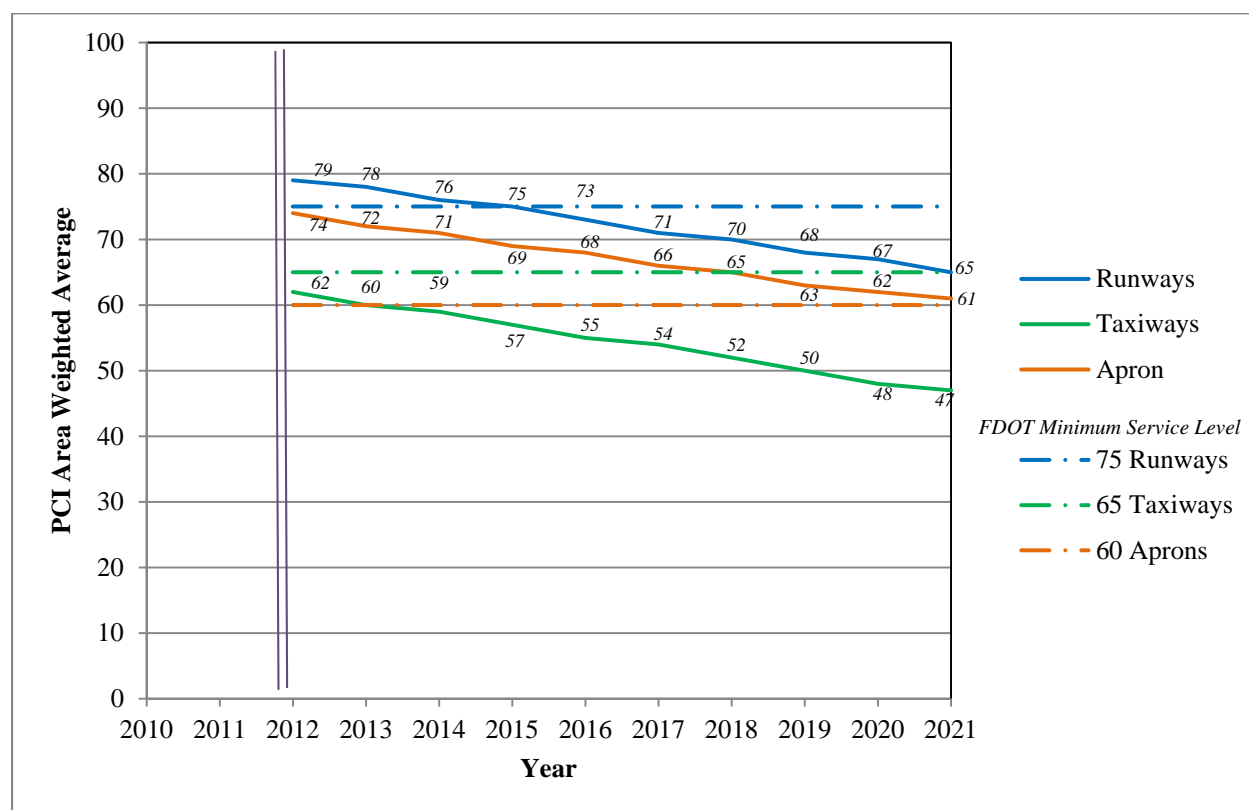


Good: 86-100 Satisfactory: 71-85 Fair: 56-70 Poor: 41-55
 Very Poor: 26-40 Serious: 11-25 Failed: 0-10

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 Homestead General Aviation 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 General Aviation (GA) airports.

Figure 4-1: Predicted PCI by Pavement Use



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

5. MAINTENANCE POLICIES AND COSTS

5.1 Policies

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

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

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

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

Table 5-3: FDOT Minimum Service Level PCI for General Aviation Airports

| Minimum PCI | | |
|-------------|---------|-------|
| Runway | Taxiway | Apron |
| 75 | 65 | 60 |

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

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

Table 5-4: M&R Activities for General Aviation 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
General Aviation 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 2012. The analysis was conducted using an unlimited budget. An unlimited budget allows all M&R needs to be identified along with the associated cost regardless of priority.

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

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

| Branch Name | Section ID | Surface Type | Section Area (ft²) | Major M&R Costs* | PCI Before M&R | M&R Activity | PCI After M&R |
|--------------------|-------------------|---------------------|--------------------------------------|-----------------------------|---------------------------|-------------------------|--------------------------|
| Taxiway Alpha | 160 | AC | 14,699 | \$34,219.32 | 64 | Mill and Overlay | 100 |
| Taxiway Alpha | 260 | AC | 5,369 | \$15,430.92 | 62 | Mill and Overlay | 100 |
| Taxiway Alpha | 295 | AC | 4,189 | \$19,136.00 | 56 | Mill and Overlay | 100 |
| Taxiway A-3 | 250 | AC | 6,135 | \$19,305.51 | 61 | Mill and Overlay | 100 |
| Taxiway B-2 | 120 | AC | 21,223 | \$133,494.82 | 43 | Mill and Overlay | 100 |
| Taxiway B-3 | 130 | AC | 12,237 | \$85,942.43 | 39 | Reconstruction | 100 |
| Taxiway B-4 | 140 | AC | 15,569 | \$97,928.84 | 40 | Mill and Overlay | 100 |
| Taxiway B-5 | 150 | AC | 6,211 | \$21,241.53 | 60 | Mill and Overlay | 100 |
| | | | | \$426,699.37 | 53 | | 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 (ft²) | Major M&R Costs* | PCI Before M&R | M&R Activity | PCI After M&R |
|--------------------|-------------------|---------------------|--------------------------------------|-----------------------------|---------------------------|-------------------------|--------------------------|
| Taxiway Alpha | 160 | AC | 14,699 | \$9,554.36 | 64 | Microsurfacing | 100 |
| Taxiway Alpha | 260 | AC | 5,369 | \$3,489.94 | 62 | Microsurfacing | 100 |
| Taxiway Alpha | 295 | AC | 4,189 | \$2,722.94 | 56 | Microsurfacing | 100 |
| Taxiway A-3 | 250 | AC | 6,135 | \$3,987.47 | 61 | Microsurfacing | 100 |
| Taxiway B-2 | 120 | AC | 21,223 | \$13,795.17 | 43 | Microsurfacing | 100 |
| Taxiway B-3 | 130 | AC | 12,237 | \$85,942.43 | 39 | Reconstruction | 100 |
| Taxiway B-4 | 140 | AC | 15,569 | \$10,119.83 | 40 | Microsurfacing | 100 |
| Taxiway B-5 | 150 | AC | 6,211 | \$4,037.13 | 60 | Microsurfacing | 100 |
| | | | | \$133,649.27 | 53 | | 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

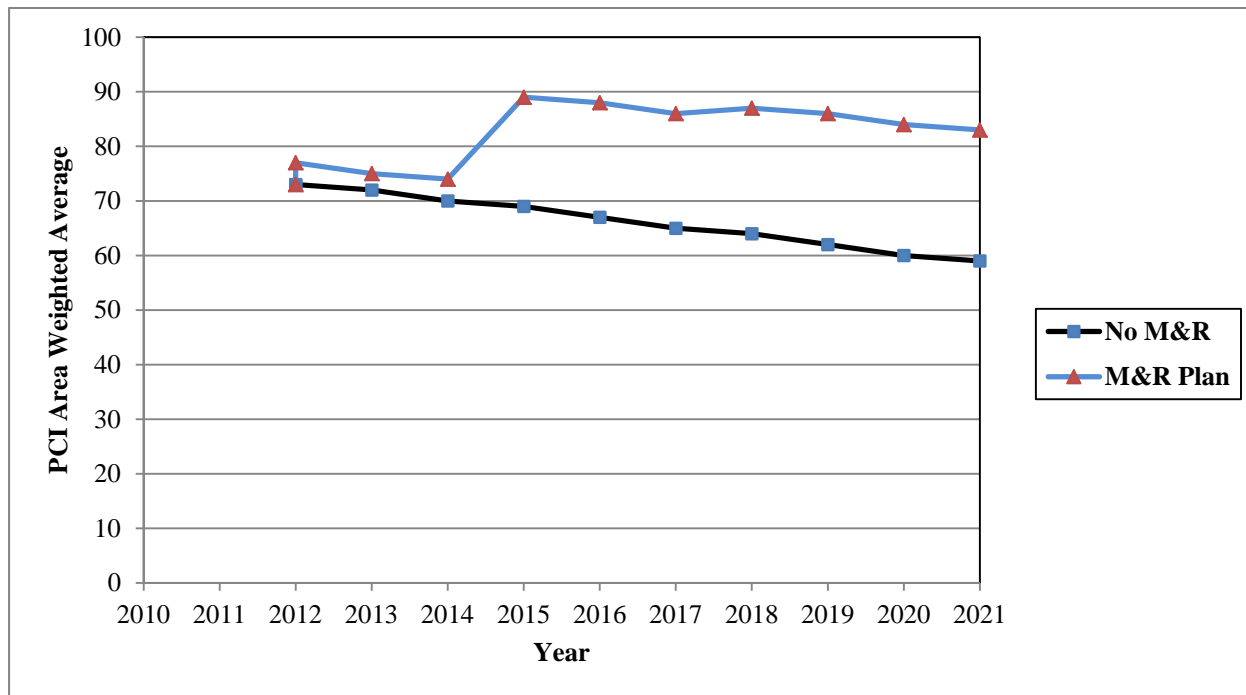
| Branch Name | Branch ID | Section ID | Distress Description | Distress Severity | Work Description | Work Quantity | Work Unit | Unit Cost | Work Cost |
|--------------------|------------------|-------------------|-----------------------------|--------------------------|-----------------------------|----------------------|------------------|------------------|------------------|
| North Apron | AP N | 4205 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 19,844.40 | SqFt | \$0.40 | \$7,937.81 |
| Northwest Apron | AP NW | 4105 | OIL SPILLAGE | N | Patching - AC Shallow | 64.60 | SqFt | \$2.90 | \$187.35 |
| Northwest Apron | AP NW | 4105 | WEATH/RAVEL | H | Microsurfacing - AC | 18.20 | SqFt | \$0.65 | \$11.81 |
| Northwest Apron | AP NW | 4105 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 112,199.10 | SqFt | \$0.40 | \$44,880.02 |
| Runway 10-28 | RW 10-28 | 6205 | WEATH/RAVEL | M | Surface Seal - Coat Tar | 2,229.20 | SqFt | \$0.40 | \$891.70 |
| Runway 10-28 | RW 10-28 | 6205 | WEATH/RAVEL | H | Microsurfacing - AC | 55.00 | SqFt | \$0.65 | \$35.74 |
| Runway 10-28 | RW 10-28 | 6205 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 25,926.10 | SqFt | \$0.40 | \$10,370.54 |
| Runway 18-36 | RW 18-36 | 6105 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 3,999.00 | SqFt | \$0.40 | \$1,599.60 |
| Runway 18-36 | RW 18-36 | 6110 | PATCHING | M | Patching - AC Deep | 46.10 | SqFt | \$4.90 | \$225.85 |
| Runway 18-36 | RW 18-36 | 6110 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 186,523.20 | SqFt | \$0.40 | \$74,609.91 |
| Taxiway Alpha | TW A | 205 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 10,990.30 | SqFt | \$0.40 | \$4,396.17 |
| Taxiway Alpha | TW A | 210 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 207.40 | SqFt | \$0.40 | \$82.96 |
| Taxiway Alpha | TW A | 215 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 48,649.60 | SqFt | \$0.40 | \$19,460.00 |
| Taxiway Alpha | TW A | 220 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 684.50 | SqFt | \$0.40 | \$273.78 |
| Taxiway Alpha | TW A | 270 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 5,369.10 | SqFt | \$0.40 | \$2,147.66 |
| Taxiway Alpha | TW A | 280 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 1,068.00 | SqFt | \$0.40 | \$427.20 |
| Taxiway Alpha | TW A | 290 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 1,017.00 | SqFt | \$0.40 | \$406.80 |
| Taxiway A-1 | TW A1 | 230 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 2,495.00 | SqFt | \$0.40 | \$998.00 |
| Taxiway A-1 | TW A1 | 235 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 297.00 | SqFt | \$0.40 | \$118.80 |
| Taxiway A-2 | TW A2 | 240 | WEATH/RAVEL | M | Surface Seal - Coat Tar | 482.70 | SqFt | \$0.40 | \$193.08 |
| Taxiway A-2 | TW A2 | 240 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 3,456.20 | SqFt | \$0.40 | \$1,382.48 |
| Taxiway A-3 | TW A3 | 255 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 287.00 | SqFt | \$0.40 | \$114.80 |
| Taxiway Bravo | TW B | 105 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 192,406.40 | SqFt | \$0.40 | \$76,963.20 |

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 Bravo | TW B | 180 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 12,661.00 | SqFt | \$0.40 | \$5,064.46 |
| Taxiway B-1 | TW B1 | 110 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 1,605.80 | SqFt | \$0.40 | \$642.34 |
| | | | | | | | | Total = | \$253,422.06 |

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

Figure 6-1: Budget Scenario Analysis



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

- The PCI will deteriorate from an average of 74 in 2012 to an average of 59 in ten years if no M&R activities are performed. Specific pavement sections may be closer to critical condition as identified by the immediate needs in Table IV. Estimated PCI ratings are presented in Appendix D.
- The PCI will remain at or above an average of 74 through the 10-year analysis period under the unlimited budget scenario. A 2021 PCI average of 83 with this scenario is 24 PCI points higher than a “No M&R” scenario. The total cost for Major M&R over this 10-year period is about \$2.8 million.

7. MAINTENANCE AND REHABILITATION PLAN

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

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

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

| Year | Preventative | Major M&R | Total Year Cost |
|--------------|-----------------------|-----------------------|------------------------|
| 2012 | \$253,422.07 | \$426,699.36 | \$680,121.43 |
| 2013 | \$228,914.20 | \$75,518.68 | \$304,432.88 |
| 2014 | \$251,694.64 | \$0.00 | \$251,694.64 |
| 2015 | \$91,588.93 | \$1,911,085.24 | \$2,002,674.17 |
| 2016 | \$104,444.93 | \$0.00 | \$104,444.93 |
| 2017 | \$123,407.78 | \$0.00 | \$123,407.78 |
| 2018 | \$105,068.66 | \$320,420.03 | \$425,488.69 |
| 2019 | \$118,143.41 | \$64,690.22 | \$182,833.63 |
| 2020 | \$134,059.65 | \$2,806.54 | \$136,866.19 |
| 2021 | \$151,130.62 | \$23,062.30 | \$174,192.92 |
| Total | \$1,561,874.89 | \$2,824,282.37 | \$4,386,157.26 |

Note: Costs are adjusted for inflation.

Approximately 15% of the total Major M&R cost is required in the first year (2012). According to the 2012 inspections, the following pavement sections were in immediate need of Major M&R Activity:

- **Taxiway Alpha** – Asphalt Pavement Mill and Overlay
- **Taxiways A-3/B-2/B-3/B-4/B-5** – Asphalt Pavement Mill and Overlay

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

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

8. VISUAL AIDS

8.1 System Inventory and Network Definition Drawings

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

8.2 Condition Map

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

8.3 10-Year M&R Map

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

8.4 Photographs

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

9. RECOMMENDATIONS

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

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

- **Taxiway Alpha** – Asphalt Pavement Mill and Overlay
- **Taxiways A-3/B-2/B-3/B-4/B-5** – Asphalt Pavement Mill and Overlay

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

APPENDIX A

NETWORK DEFINITION MAP

SYSTEM INVENTORY MAP

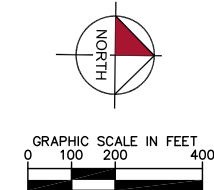
PAVEMENT INVENTORY TABLE

WORK HISTORY REPORT













Sample Unit Centroid Coordinates

| Branch | Section | Sample | Latitude | Longitude |
|----------|---------|--------|-----------|------------|
| RW 10-28 | 6205 | 102 | 25.502734 | -80.554727 |
| RW 10-28 | 6205 | 107 | 25.502738 | -80.553969 |
| RW 10-28 | 6205 | 113 | 25.502742 | -80.553059 |
| RW 10-28 | 6205 | 119 | 25.502747 | -80.552150 |
| RW 10-28 | 6205 | 125 | 25.502751 | -80.551240 |
| RW 10-28 | 6205 | 131 | 25.502756 | -80.550331 |
| RW 10-28 | 6205 | 137 | 25.502760 | -80.549421 |
| RW 10-28 | 6205 | 143 | 25.502765 | -80.548512 |
| RW 10-28 | 6205 | 149 | 25.502769 | -80.547602 |
| RW 10-28 | 6205 | 154 | 25.502773 | -80.546844 |
| RW 10-28 | 6205 | 157 | 25.502775 | -80.546389 |
| RW 10-28 | 6205 | 159 | 25.502777 | -80.546088 |
| RW 18-36 | 6110 | 112 | 25.493012 | -80.557095 |
| RW 18-36 | 6110 | 128 | 25.495213 | -80.557116 |
| RW 18-36 | 6110 | 164 | 25.500165 | -80.557165 |
| RW 18-36 | 6110 | 504 | 25.491913 | -80.556857 |
| RW 18-36 | 6110 | 540 | 25.496865 | -80.556905 |
| RW 18-36 | 6110 | 560 | 25.499617 | -80.556932 |
| RW 18-36 | 6110 | 576 | 25.501816 | -80.556953 |
| RW 18-36 | 6105 | 302 | 25.491774 | -80.556969 |
| RW 18-36 | 6105 | 305 | 25.492600 | -80.556977 |
| RW 18-36 | 6105 | 308 | 25.493425 | -80.556985 |
| RW 18-36 | 6105 | 314 | 25.495076 | -80.557001 |
| RW 18-36 | 6105 | 320 | 25.496727 | -80.557017 |
| RW 18-36 | 6105 | 325 | 25.498103 | -80.557031 |
| RW 18-36 | 6105 | 329 | 25.499203 | -80.557042 |
| RW 18-36 | 6105 | 335 | 25.500854 | -80.557058 |
| AP N | 4205 | 202 | 25.501588 | -80.550005 |
| AP N | 4205 | 400 | 25.501316 | -80.549397 |
| AP N | 4205 | 403 | 25.501311 | -80.550307 |
| AP NW | 4105 | 100 | 25.501678 | -80.553966 |
| AP NW | 4105 | 153 | 25.501536 | -80.554874 |
| AP NW | 4105 | 201 | 25.501402 | -80.554267 |
| AP NW | 4105 | 352 | 25.500987 | -80.554568 |
| AP NW | 4105 | 454 | 25.500709 | -80.555207 |
| AP NW | 4105 | 602 | 25.500300 | -80.554564 |
| TW A | 295 | 500 | 25.501947 | -80.548631 |

| Branch | Section | Sample | Latitude | Longitude |
|--------|---------|--------|-----------|------------|
| TW A | 290 | 400 | 25.501947 | -80.549310 |
| TW A | 280 | 300 | 25.501943 | -80.550556 |
| TW A | 270 | 200 | 25.501911 | -80.553891 |
| TW A | 260 | 100 | 25.501904 | -80.555325 |
| TW A-3 | 255 | 300 | 25.502185 | -80.546071 |
| TW A-3 | 250 | 301 | 25.502508 | -80.546097 |
| TW A-2 | 240 | 201 | 25.502204 | -80.550558 |
| TW A-1 | 235 | 101 | 25.502140 | -80.555034 |
| TW A-1 | 230 | 100 | 25.502467 | -80.555015 |
| TW A | 220 | 133 | 25.502089 | -80.546109 |
| TW A | 215 | 108 | 25.502051 | -80.553659 |
| TW A | 215 | 117 | 25.502065 | -80.550930 |
| TW A | 215 | 123 | 25.502074 | -80.549111 |
| TW A | 215 | 129 | 25.502083 | -80.547292 |
| TW A | 210 | 104 | 25.502045 | -80.554871 |
| TW A | 205 | 102 | 25.502042 | -80.555432 |
| TW B | 185 | 803 | 25.500283 | -80.555417 |
| TW B | 180 | 801 | 25.500225 | -80.555763 |
| TW A | 160 | 601 | 25.501987 | -80.556691 |
| TW B-5 | 155 | 501 | 25.497691 | -80.556743 |
| TW B-5 | 150 | 502 | 25.497675 | -80.556732 |
| TW B-4 | 140 | 402 | 25.495215 | -80.556396 |
| TW B-3 | 130 | 302 | 25.493388 | -80.556375 |
| TW B-2 | 120 | 201 | 25.492700 | -80.556600 |
| TW B-1 | 110 | 202 | 25.491200 | -80.556431 |
| TW B | 105 | 103 | 25.492056 | -80.556214 |
| TW B | 105 | 116 | 25.495632 | -80.556249 |
| TW B | 105 | 123 | 25.497558 | -80.556268 |
| TW B | 105 | 132 | 25.500035 | -80.556292 |



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 |

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

| NUMBER | DATE | REVISIONS | | | | | |
|--|------|-----------|-----|---|-----|-------|--|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| DESIGNED: | KHA | DRAWN: | KHA | CHECKED: | KHA | DATE: | |
| K:\PPL_Austin\14470001\CADD\PLAN\BDET01\01\CBH01-002-101-INVENTY.dwg | | | | PLOTED: May 3 2017 - 3:36 PM PLT: REV: 01 | | | |



| | |
|--|--|
| SYSTEM INVENTORY MAP | |
| HOMESTEAD GENERAL AVIATION HOMESTEAD, MIAMI-DADE CO., FLORIDA | |
| FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE | |

| |
|---------------|
| IDENTIFIER |
| X51 |
| FOOT DISTRICT |
| 6 |

Table A-1: Pavement Inventory

| Branch Name | Branch ID | Branch Use | Section ID | Length (ft) | Width (ft) | True Area (ft²) | Section Rank | Surface Type | Last Const. Date | Last Insp. Date | Total Samples |
|--------------------|------------------|-------------------|-------------------|--------------------|-------------------|-----------------------------------|---------------------|---------------------|-------------------------|------------------------|----------------------|
| North Apron | AP N | APRON | 4205 | 425 | 200 | 85,048 | P | AC | 1/1/2001 | 4/3/2012 | 25 |
| Northwest Apron | AP NW | APRON | 4105 | 600 | 470 | 282,998 | P | AC | 1/1/2001 | 4/3/2012 | 59 |
| Runway 10-28 | RW 10-28 | RUNWAY | 6205 | 2999 | 75 | 224,925 | P | AC | 1/1/1962 | 4/3/2012 | 60 |
| Runway 18-36 | RW 18-36 | RUNWAY | 6105 | 3999 | 50 | 199,950 | P | AAC | 1/1/2001 | 4/3/2012 | 40 |
| Runway 18-36 | RW 18-36 | RUNWAY | 6110 | 7998 | 25 | 199,950 | P | AC | 1/1/2001 | 4/3/2012 | 40 |
| Taxiway Alpha | TW A | TAXIWAY | 160 | 195 | 75 | 14,699 | P | AC | 1/1/2001 | 4/3/2012 | 4 |
| Taxiway Alpha | TW A | TAXIWAY | 205 | 340 | 40 | 13,738 | P | AC | 1/1/1967 | 4/3/2012 | 3 |
| Taxiway Alpha | TW A | TAXIWAY | 210 | 170 | 40 | 6,800 | P | AAC | 1/1/1994 | 4/3/2012 | 2 |
| Taxiway Alpha | TW A | TAXIWAY | 215 | 2780 | 40 | 111,200 | P | AC | 1/1/1962 | 4/3/2012 | 28 |
| Taxiway Alpha | TW A | TAXIWAY | 220 | 370 | 40 | 14,799 | P | AAC | 1/1/1994 | 4/3/2012 | 3 |
| Taxiway Alpha | TW A | TAXIWAY | 260 | 100 | 50 | 5,369 | P | AC | 1/1/2001 | 4/3/2012 | 1 |
| Taxiway Alpha | TW A | TAXIWAY | 270 | 100 | 50 | 5,369 | P | AC | 1/1/2001 | 4/3/2012 | 1 |
| Taxiway Alpha | TW A | TAXIWAY | 280 | 80 | 50 | 4,273 | P | AC | 1/1/2001 | 4/3/2012 | 1 |
| Taxiway Alpha | TW A | TAXIWAY | 290 | 80 | 50 | 4,069 | P | AC | 1/1/2001 | 4/3/2012 | 1 |
| Taxiway Alpha | TW A | TAXIWAY | 295 | 80 | 50 | 4,189 | P | AC | 1/1/1970 | 4/3/2012 | 1 |
| Taxiway A-1 | TW A1 | TAXIWAY | 230 | 150 | 40 | 6,236 | P | AC | 1/1/1962 | 4/3/2012 | 1 |
| Taxiway A-1 | TW A1 | TAXIWAY | 235 | 50 | 50 | 2,971 | P | AAC | 1/1/1994 | 4/3/2012 | 1 |
| Taxiway A-2 | TW A2 | TAXIWAY | 240 | 250 | 40 | 11,520 | P | AC | 1/1/1962 | 4/3/2012 | 2 |
| Taxiway A-3 | TW A3 | TAXIWAY | 250 | 150 | 40 | 6,135 | P | AC | 1/1/1962 | 4/3/2012 | 1 |
| Taxiway A-3 | TW A3 | TAXIWAY | 255 | 50 | 50 | 2,869 | P | AAC | 1/1/1994 | 4/3/2012 | 1 |
| Taxiway Bravo | TW B | TAXIWAY | 105 | 3848 | 50 | 192,408 | P | AC | 1/1/2001 | 4/3/2012 | 39 |
| Taxiway Bravo | TW B | TAXIWAY | 180 | 240 | 50 | 12,661 | P | AC | 1/1/2001 | 4/3/2012 | 3 |

Table A-1: Pavement Inventory (Continued)

| Branch Name | Branch ID | Branch Use | Section ID | Length (ft) | Width (ft) | True Area (ft²) | Section Rank | Surface Type | Last Const. Date | Last Insp. Date | Total Samples |
|--------------------|------------------|-------------------|-------------------|--------------------|-------------------|-----------------------------------|---------------------|---------------------|-------------------------|------------------------|----------------------|
| Taxiway Bravo | TW B | TAXIWAY | 185 | 50 | 16 | 852 | P | PCC | 1/1/2001 | 4/3/2012 | 1 |
| Taxiway B-1 | TW B1 | TAXIWAY | 110 | 260 | 75 | 20,223 | P | AAC | 1/1/2001 | 4/3/2012 | 5 |
| Taxiway B-2 | TW B2 | TAXIWAY | 120 | 200 | 100 | 21,223 | P | AC | 1/1/2001 | 4/3/2012 | 4 |
| Taxiway B-3 | TW B3 | TAXIWAY | 130 | 240 | 50 | 12,237 | P | AC | 1/1/2001 | 4/3/2012 | 3 |
| Taxiway B-4 | TW B4 | TAXIWAY | 140 | 250 | 50 | 15,569 | P | AC | 1/1/1967 | 4/3/2012 | 3 |
| Taxiway B-5 | TW B5 | TAXIWAY | 150 | 100 | 50 | 6,211 | P | AC | 1/1/2001 | 4/3/2012 | 2 |
| Taxiway B-5 | TW B5 | TAXIWAY | 155 | 100 | 100 | 10,114 | P | AAC | 1/1/2009 | 4/3/2012 | 2 |

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

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

Date:05/08/2012

Work History Report

1 of 5

Pavement Database:

Network: X51 **Branch:** AP N (NORTH APRON) **Section:** 4205 **Surface:** AC
L.C.D.: 01/01/1962 **Use:** APRON **Rank P Length:** 425.00 Ft **Width:** 200.00 Ft **True Area:** 85,048.00 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|---|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | THIS APRON HAS A NEW EMULSION SEAL (APPROX. 1994) 1962: 1" P-401 ON 6" P-211 |
| 01/01/1994 | IMPORTED | REPAIR | | | False | |
| 01/01/1962 | IMPORTED | BUILT | | 1.00 | True | |

Network: X51 **Branch:** AP NW (NW APRON) **Section:** 4105 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** APRON **Rank P Length:** 600.00 Ft **Width:** 470.00 Ft **True Area:**282.998.48 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|--|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | 1967: 1.5" - 2" P-401 ON 7" P-211 PAVEMENT AREA SHOWN REPRESENTS NON-FENCED AREA. CONSTRUCTION FENCE LIM |
| 01/01/1967 | IMPORTED | BUILT | | 1.50 | True | |
| 01/01/1967 | IMPORTED | OVERLAY | | | True | |

Network: X51 **Branch:** RW 10-28 (RUNWAY 10-28) **Section:** 6205 **Surface:** AC
L.C.D.: 01/01/1962 **Use:** RUNWAY **Rank P Length:** 2,999.00 Ft **Width:** 75.00 Ft **True Area:**224.925.00 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|------------------|------|------------------|-----------|---|
| 01/01/1994 | IMPORTED | REPAIR | | | False | THIS FEATURE HAS A NEW (1994) EMULSION SEAL 1962: 1" P-401 ON 6" P-211 |
| 01/01/1962 | IMPORTED | BUILT | | 1.00 | True | |

Network: X51 **Branch:** RW 18-36 (RUNWAY 18-36) **Section:** 6105 **Surface:** AAC
L.C.D.: 01/01/2009 **Use:** RUNWAY **Rank P Length:** 3,999.00 Ft **Width:** 50.00 Ft **True Area:**199,950.00 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|--|
| 01/01/2009 | ML-OL | Mill and Overlay | \$0 | 0.00 | True | 1993 AC OVERLAY (2" AT CENTERLINE TO A 1" MINIMUM) 1967: 1.5" - 2" P-401 ON 7" P-211 1967 2" P401 ON 7" P211 |
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1993 | IMPORTED | OVERLAY | | 2.00 | True | |
| 01/01/1967 | IMPORTED | OVERLAY | | 1.50 | True | |
| 01/01/1967 | IMPORTED | BUILT | | 2.00 | True | |

Network: X51 **Branch:** RW 18-36 (RUNWAY 18-36) **Section:** 6110 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** RUNWAY **Rank P Length:** 7,998.00 Ft **Width:** 25.00 Ft **True Area:**199.950.00 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | 1967: 1.5" - 2" P-401 ON 7" P-211 |
| 01/01/1967 | IMPORTED | BUILT | | 1.50 | True | |

Network: X51 **Branch:** TW A (TAXIWAY ALPHA) **Section:** 160 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 195.00 Ft **Width:** 75.00 Ft **True Area:** 14.699.01 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|---------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | 1967: 1.5"-2" P-401 ON 7" P-211 |
| 01/01/1967 | INITIAL | Initial Construction | \$0 | 1.50 | True | |

Network: X51 **Branch:** TW A (TAXIWAY ALPHA) **Section:** 205 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 340.00 Ft **Width:** 40.00 Ft **True Area:** 13,738.03 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|------------------|------|------------------|-----------|-----------------------------------|
| 01/01/1967 | IMPORTED | BUILT | | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Date:05/08/2012

Work History Report

2 of 5

Pavement Database:

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 210 Surface: AAC
 L.C.D.: 01/01/1994 Use: TAXIWAY Rank P Length: 170.00 Ft Width: 40.00 Ft True Area: 6,800.00 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|------------------|------|------------------|-----------|-------------------------|
| 01/01/1994 | IMPORTED | OVERLAY | | 1.00 | True | 1994 1" AC OVERLAY |
| 01/01/1962 | IMPORTED | BUILT | | 1.00 | True | 1962 1" P401 ON 6" P211 |

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 215 Surface: AC
 L.C.D.: 01/01/1962 Use: TAXIWAY Rank P Length: 2,780.00 Ft Width: 40.00 Ft True Area: 111,200.00 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|------------------|------|------------------|-----------|----------------------------|
| 01/01/1962 | IMPORTED | BUILT | | 1.00 | True | 1962: 1" P-401 ON 6" P-211 |

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 220 Surface: AAC
 L.C.D.: 01/01/1994 Use: TAXIWAY Rank P Length: 370.00 Ft Width: 40.00 Ft True Area: 14,799.10 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|------------------|------|------------------|-----------|-------------------------|
| 01/01/1994 | IMPORTED | OVERLAY | | 1.00 | True | 1994 1" AC OVERLAY |
| 01/01/1962 | IMPORTED | BUILT | | 1.00 | True | 1962 1" P401 ON 6" P211 |

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 260 Surface: AC
 L.C.D.: 01/01/1967 Use: TAXIWAY Rank P Length: 100.00 Ft Width: 50.00 Ft True Area: 5,369.14 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | IMPORTED | BUILT | | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 270 Surface: AC
 L.C.D.: 01/01/1967 Use: TAXIWAY Rank P Length: 100.00 Ft Width: 50.00 Ft True Area: 5,369.14 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | IMPORTED | BUILT | | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 280 Surface: AC
 L.C.D.: 01/01/1962 Use: TAXIWAY Rank P Length: 80.00 Ft Width: 50.00 Ft True Area: 4,273.01 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|----------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1962 | IMPORTED | BUILT | | 1.00 | True | 1962: 1" P-401 ON 6" P-211 |

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 290 Surface: AC
 L.C.D.: 01/01/1962 Use: TAXIWAY Rank P Length: 80.00 Ft Width: 50.00 Ft True Area: 4,069.14 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|----------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1962 | IMPORTED | BUILT | | 1.00 | True | 1962: 1" P-401 ON 6" P-211 |

Network: X51 Branch: TW A (TAXIWAY ALPHA) Section: 295 Surface: AC
 L.C.D.: 01/01/1970 Use: TAXIWAY Rank P Length: 80.00 Ft Width: 50.00 Ft True Area: 4,189.14 SqF

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

Date:05/08/2012

Work History Report

3 of 5

Pavement Database:

Network: X51 **Branch:** TW A1 **(TAXIWAY A1)** **Section:** 230 **Surface:** AC
L.C.D.: 01/01/1962 **Use:** TAXIWAY **Rank P Length:** 150.00 Ft **Width:** 40.00 Ft **True Area:** 6,236.50 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|----------------------|------|------------------|-----------|----------------------------|
| 01/01/1962 | INITIAL | Initial Construction | \$0 | 1.00 | True | 1962: 1" P-401 ON 6" P-211 |

Network: X51 **Branch:** TW A1 **(TAXIWAY A1)** **Section:** 235 **Surface:** AAC
L.C.D.: 01/01/1994 **Use:** TAXIWAY **Rank P Length:** 50.00 Ft **Width:** 50.00 Ft **True Area:** 2,971.07 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|----------------------|------|------------------|-----------|----------------------------|
| 01/01/1994 | ML-OL | Mill and Overlay | \$0 | 1.00 | True | 1994 1" AC OVERLAY |
| 01/01/1962 | INITIAL | Initial Construction | \$0 | 1.00 | True | 1962: 1" P-401 ON 6" P-211 |

Network: X51 **Branch:** TW A2 **(TAXIWAY A2)** **Section:** 240 **Surface:** AC
L.C.D.: 01/01/1962 **Use:** TAXIWAY **Rank P Length:** 250.00 Ft **Width:** 40.00 Ft **True Area:** 11,519.91 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|----------------------|------|------------------|-----------|----------------------------|
| 01/01/1962 | INITIAL | Initial Construction | \$0 | 1.00 | True | 1962: 1" P-401 ON 6" P-211 |

Network: X51 **Branch:** TW A3 **(TAXIWAY A3)** **Section:** 250 **Surface:** AC
L.C.D.: 01/01/1962 **Use:** TAXIWAY **Rank P Length:** 150.00 Ft **Width:** 40.00 Ft **True Area:** 6,134.57 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|----------------------|------|------------------|-----------|----------------------------|
| 01/01/1962 | INITIAL | Initial Construction | \$0 | 1.00 | True | 1962: 1" P-401 ON 6" P-211 |

Network: X51 **Branch:** TW A3 **(TAXIWAY A3)** **Section:** 255 **Surface:** AAC
L.C.D.: 01/01/1994 **Use:** TAXIWAY **Rank P Length:** 50.00 Ft **Width:** 50.00 Ft **True Area:** 2,869.14 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|----------------------|------|------------------|-----------|-------------------------|
| 01/01/1994 | ML-OL | Mill and Overlay | \$0 | 1.00 | True | 1994 1" AC OVERLAY |
| 01/01/1962 | INITIAL | Initial Construction | \$0 | 1.00 | True | 1962 1" P401 ON 6" P211 |

Network: X51 **Branch:** TW B **(TAXIWAY BRAVO)** **Section:** 105 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 3,848.16 Ft **Width:** 50.00 Ft **True Area:**192,408.00 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | IMPORTED | BUILT | | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Network: X51 **Branch:** TW B **(TAXIWAY BRAVO)** **Section:** 180 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 240.00 Ft **Width:** 50.00 Ft **True Area:** 12,661.15 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | IMPORTED | BUILT | | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Network: X51 **Branch:** TW B **(TAXIWAY BRAVO)** **Section:** 185 **Surface:** PCC
L.C.D.: 01/01/1970 **Use:** TAXIWAY **Rank P Length:** 50.00 Ft **Width:** 16.00 Ft **True Area:** 851.79 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1970 | IMPORTED | BUILT | | | True | ESTIMATE 1970 PCC |

Date:05/08/2012

Work History Report

4 of 5

Pavement Database:

Network: X51 **Branch:** TW B1 **(TAXIWAY B1)** **Section:** 110 **Surface:** AAC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 260.00 Ft **Width:** 75.00 Ft **True Area:** 20,222.62 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1994 | ML-OL | Mill and Overlay | \$0 | 1.00 | True | 1994 1" AC OVERLAY |
| 01/01/1967 | INITIAL | Initial Construction | \$0 | 2.00 | True | 1967 2" P401 ON 7" P211 |

Network: X51 **Branch:** TW B2 **(TAXIWAY B2)** **Section:** 120 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 200.00 Ft **Width:** 100.00 Ft **True Area:** 21,223.34 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | INITIAL | Initial Construction | \$0 | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Network: X51 **Branch:** TW B3 **(TAXIWAY B3)** **Section:** 130 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 240.00 Ft **Width:** 50.00 Ft **True Area:** 12,237.28 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | INITIAL | Initial Construction | \$0 | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Network: X51 **Branch:** TW B4 **(TAXIWAY B4)** **Section:** 140 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 250.00 Ft **Width:** 50.00 Ft **True Area:** 15,568.97 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|----------------------|------|------------------|-----------|----------|
| 01/01/1967 | INITIAL | Initial Construction | \$0 | 0.00 | True | |

Network: X51 **Branch:** TW B5 **(TAXIWAY B5)** **Section:** 150 **Surface:** AC
L.C.D.: 01/01/1967 **Use:** TAXIWAY **Rank P Length:** 100.00 Ft **Width:** 50.00 Ft **True Area:** 6,210.97 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | INITIAL | Initial Construction | \$0 | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

Network: X51 **Branch:** TW B5 **(TAXIWAY B5)** **Section:** 155 **Surface:** AAC
L.C.D.: 01/01/2009 **Use:** TAXIWAY **Rank P Length:** 100.00 Ft **Width:** 100.00 Ft **True Area:** 10,114.48 SqF

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major M&R | Comments |
|------------|-----------|-----------------------------|------|------------------|-----------|-----------------------------------|
| 01/01/2009 | ML-OL | Mill and Overlay | \$0 | 0.00 | True | |
| 01/01/2001 | SS-RE | Surface Seal - Rejuvenating | \$0 | 0.00 | False | |
| 01/01/1967 | INITIAL | Initial Construction | \$0 | 1.50 | True | 1967: 1.5" - 2" P-401 ON 7" P-211 |

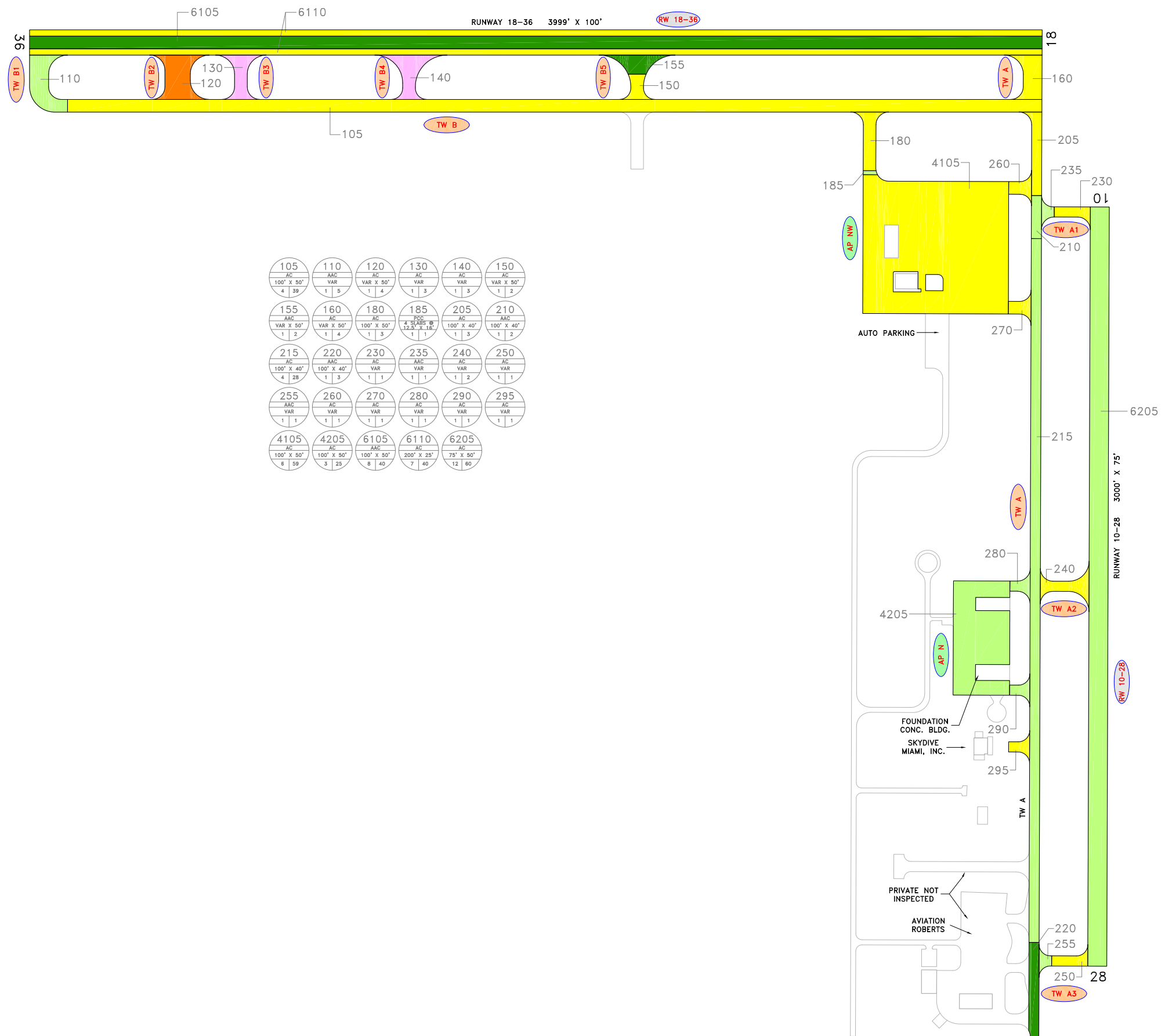
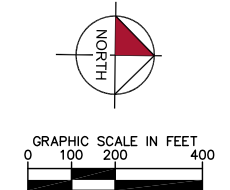
Summary:

| Work Description | Section Count | Area Total (SqFt) | Thickness Avg (in) | Thickness STD (in) |
|-----------------------------|---------------|-------------------|--------------------|--------------------|
| BUILT | 17 | 1,368,599.12 | 1.30 | .32 |
| Initial Construction | 12 | 130,007.86 | 1.21 | .50 |
| Mill and Overlay | 5 | 236,127.31 | .60 | .55 |
| OVERLAY | 5 | 704,497.58 | 1.37 | .48 |
| REPAIR | 2 | 309,973.00 | | |
| Surface Seal - Rejuvenating | 17 | 1,077,655.55 | .00 | .00 |

STD = Standard Deviation

APPENDIX B

2012 CONDITION MAP PAVEMENT CONDITION INDEX TABLE



| | | | | | |
|------------|------------|------------|------------|------------|------------|
| 105 | 110 | 120 | 130 | 140 | 150 |
| AC | AAC | AC | AC | AC | AC |
| 100' X 50' | VAR | VAR X 50' | VAR | VAR | VAR X 50' |
| 4 39 | 1 5 | 1 4 | 1 3 | 1 3 | 1 2 |
| 155 | 160 | 180 | 185 | 205 | 210 |
| AC | AC | AC | AC | AC | AC |
| VAR X 50' | VAR X 50' | 100' X 50' | 100' X 40' | 100' X 40' | 100' X 40' |
| 1 2 | 1 4 | 1 3 | 1 3 | 1 3 | 1 2 |
| 215 | 220 | 230 | 235 | 240 | 250 |
| AC | AAC | AC | AC | AC | AC |
| 100' X 40' | 100' X 40' | VAR | VAR | VAR | VAR |
| 4 28 | 1 3 | 1 1 | 1 1 | 1 2 | 1 1 |
| 255 | 260 | 270 | 280 | 290 | 295 |
| AC | AC | AC | AC | AC | AC |
| VAR | VAR | VAR | VAR | VAR | VAR |
| 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 |
| 4105 | 4205 | 6105 | 6110 | 6205 | |
| AC | AC | AAC | AC | AC | |
| 100' X 50' | 100' X 50' | 100' X 50' | 200' X 25' | 75' X 50' | |
| 8 59 | 3 25 | 8 40 | 7 40 | 12 60 | |

LEGEND

— TYPICAL RUNWAY BRANCH ID
— TYPICAL TAXIWAY BRANCH ID
— TYPICAL APRON BRANCH ID

| | |
|-------------|------------------------|
| Green | PCI 86-100 GOOD |
| Light Green | PCI 71-85 SATISFACTORY |
| Yellow | PCI 56-70 FAIR |
| Orange | PCI 41-55 POOR |
| Pink | PCI 26-40 VERY POOR |
| Red | PCI 11-25 SERIOUS |
| Grey | 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: | KHA | DRAWN: KHA |
| CHECKED: | KHA | DATE: |



2012 CONDITION MAP

HOMESTEAD GENERAL AVIATION
HOMESTEAD, MIAMI-DADE CO., FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER

X51

FOOT DISTRICT

6

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 |
|-----------------|-----------|------------|------------|------------------------------|--------------|--------------|-------------------------|---------------|-----|--------------|
| North Apron | AP N | APRON | 4205 | 85,048 | P | AC | 3 | 25 | 81 | Satisfactory |
| Northwest Apron | AP NW | APRON | 4105 | 282,998 | P | AC | 6 | 59 | 68 | Fair |
| Runway 10-28 | RW 10-28 | RUNWAY | 6205 | 224,925 | P | AC | 12 | 60 | 79 | Satisfactory |
| Runway 18-36 | RW 18-36 | RUNWAY | 6105 | 199,950 | P | AAC | 8 | 40 | 94 | Good |
| Runway 18-36 | RW 18-36 | RUNWAY | 6110 | 199,950 | P | AC | 7 | 40 | 69 | Fair |
| Taxiway Alpha | TW A | TAXIWAY | 160 | 14,699 | P | AC | 1 | 4 | 64 | Fair |
| Taxiway Alpha | TW A | TAXIWAY | 205 | 13,738 | P | AC | 1 | 3 | 66 | Fair |
| Taxiway Alpha | TW A | TAXIWAY | 210 | 6,800 | P | AAC | 1 | 2 | 81 | Satisfactory |
| Taxiway Alpha | TW A | TAXIWAY | 215 | 111,200 | P | AC | 4 | 28 | 75 | Satisfactory |
| Taxiway Alpha | TW A | TAXIWAY | 220 | 14,799 | P | AAC | 1 | 3 | 88 | Good |
| Taxiway Alpha | TW A | TAXIWAY | 260 | 5,369 | P | AC | 1 | 1 | 62 | Fair |
| Taxiway Alpha | TW A | TAXIWAY | 270 | 5,369 | P | AC | 1 | 1 | 69 | Fair |
| Taxiway Alpha | TW A | TAXIWAY | 280 | 4,273 | P | AC | 1 | 1 | 80 | Satisfactory |
| Taxiway Alpha | TW A | TAXIWAY | 290 | 4,069 | P | AC | 1 | 1 | 75 | Satisfactory |
| Taxiway Alpha | TW A | TAXIWAY | 295 | 4,189 | P | AC | 1 | 1 | 56 | Fair |
| Taxiway A-1 | TW A1 | TAXIWAY | 230 | 6,236 | P | AC | 1 | 1 | 66 | Fair |
| Taxiway A-1 | TW A1 | TAXIWAY | 235 | 2,971 | P | AAC | 1 | 1 | 79 | Satisfactory |
| Taxiway A-2 | TW A2 | TAXIWAY | 240 | 11,520 | P | AC | 1 | 2 | 66 | Fair |
| Taxiway A-3 | TW A3 | TAXIWAY | 250 | 6,135 | P | AC | 1 | 1 | 61 | Fair |
| Taxiway A-3 | TW A3 | TAXIWAY | 255 | 2,869 | P | AAC | 1 | 1 | 85 | Satisfactory |
| Taxiway Bravo | TW B | TAXIWAY | 105 | 192,408 | P | AC | 4 | 39 | 69 | Fair |
| Taxiway Bravo | TW B | TAXIWAY | 180 | 12,661 | P | AC | 1 | 3 | 69 | Fair |

Table B-1: Pavement Condition Index (Continued)

| Branch Name | Branch ID | Branch Use | Section ID | True Area (ft²) | Section Rank | Surface Type | Total Samples Inspected | Total Samples | PCI | PCI Category |
|--------------------|------------------|-------------------|-------------------|-----------------------------------|---------------------|---------------------|--------------------------------|----------------------|------------|---------------------|
| Taxiway Bravo | TW B | TAXIWAY | 185 | 852 | P | PCC | 1 | 1 | 84 | Satisfactory |
| Taxiway B-1 | TW B1 | TAXIWAY | 110 | 20,223 | P | AAC | 1 | 5 | 76 | Satisfactory |
| Taxiway B-2 | TW B2 | TAXIWAY | 120 | 21,223 | P | AC | 1 | 4 | 43 | Poor |
| Taxiway B-3 | TW B3 | TAXIWAY | 130 | 12,237 | P | AC | 1 | 3 | 39 | Very Poor |
| Taxiway B-4 | TW B4 | TAXIWAY | 140 | 15,569 | P | AC | 1 | 3 | 40 | Very Poor |
| Taxiway B-5 | TW B5 | TAXIWAY | 150 | 6,211 | P | AC | 1 | 2 | 60 | Fair |
| Taxiway B-5 | TW B5 | TAXIWAY | 155 | 10,114 | P | AAC | 1 | 2 | 100 | Good |

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

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

APPENDIX C

**BRANCH CONDITION REPORT
SECTION CONDITION REPORT**

Date: 4 /5/2012

Branch Condition Report

1 of 2

Pavement Database: NetworkID: X51

| 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 N (NORTH APRON) | 1 | 425.00 | 200.00 | 85,048.00 | APRON | 81.00 | 0.00 | 81.00 |
| AP NW (NW APRON) | 1 | 600.00 | 470.00 | 282,998.48 | APRON | 68.00 | 0.00 | 68.00 |
| RW 10-28 (RUNWAY 10-28) | 1 | 2,999.00 | 75.00 | 224,925.00 | RUNWAY | 79.00 | 0.00 | 79.00 |
| RW 18-36 (RUNWAY 18-36) | 2 | 11,997.00 | 37.50 | 399,900.00 | RUNWAY | 81.50 | 12.50 | 81.50 |
| TW A (TAXIWAY ALPHA) | 10 | 4,295.00 | 48.50 | 184,505.71 | TAXIWAY | 71.60 | 9.39 | 73.85 |
| TW A1 (TAXIWAY A1) | 2 | 200.00 | 45.00 | 9,207.57 | TAXIWAY | 72.50 | 6.50 | 70.19 |
| TW A2 (TAXIWAY A2) | 1 | 250.00 | 40.00 | 11,519.91 | TAXIWAY | 66.00 | 0.00 | 66.00 |
| TW A3 (TAXIWAY A3) | 2 | 200.00 | 45.00 | 9,003.71 | TAXIWAY | 73.00 | 12.00 | 68.65 |
| TW B (TAXIWAY BRAVO) | 3 | 4,138.16 | 38.67 | 205,920.94 | TAXIWAY | 74.00 | 7.07 | 69.06 |
| TW B1 (TAXIWAY B1) | 1 | 260.00 | 75.00 | 20,222.62 | TAXIWAY | 76.00 | 0.00 | 76.00 |
| TW B2 (TAXIWAY B2) | 1 | 200.00 | 100.00 | 21,223.34 | TAXIWAY | 43.00 | 0.00 | 43.00 |
| TW B3 (TAXIWAY B3) | 1 | 240.00 | 50.00 | 12,237.28 | TAXIWAY | 39.00 | 0.00 | 39.00 |
| TW B4 (TAXIWAY B4) | 1 | 250.00 | 50.00 | 15,568.97 | TAXIWAY | 40.00 | 0.00 | 40.00 |
| TW B5 (TAXIWAY B5) | 2 | 200.00 | 75.00 | 16,325.45 | TAXIWAY | 80.00 | 20.00 | 84.78 |

Date: 4 /5/2012

Branch Condition Report

2 of 2

Pavement Database:

| Use Category | Number of Sections | Total Area (SqFt) | Arithmetic Average PCI | Average PCI STD. | Weighted Average PCI |
|--------------|--------------------|---------------------|------------------------|------------------|----------------------|
| APRON | 2 | 368,046.48 | 74.50 | 6.50 | 71.00 |
| RUNWAY | 3 | 624,825.00 | 80.67 | 10.27 | 80.60 |
| TAXIWAY | 24 | 505,735.50 | 68.88 | 14.61 | 68.82 |
| All | 29 | 1,498,606.98 | 70.48 | 14.30 | 74.27 |

STD = Standard Deviation

Date: 4 /5/2012

Section Condition Report

1 of 3

Pavement Database: NetworkID: X51

| Branch ID | Section ID | Last Const. Date | Surface | Use | Rank | Lanes | True Area (SqFt) | Last Inspection Date | Age At Inspection | PCI |
|-------------------------|------------|------------------|---------|---------|------|-------|------------------|----------------------|-------------------|-------|
| AP N (NORTH APRON) | 4205 | 01/01/1962 | AC | APRON | P | 0 | 85,048.00 | 04/03/2012 | 50 | 81.00 |
| AP NW (NW APRON) | 4105 | 01/01/1967 | AC | APRON | P | 0 | 282,998.48 | 04/03/2012 | 45 | 68.00 |
| RW 10-28 (RUNWAY 10-28) | 6205 | 01/01/1962 | AC | RUNWAY | P | 0 | 224,925.00 | 04/03/2012 | 50 | 79.00 |
| RW 18-36 (RUNWAY 18-36) | 6105 | 01/01/1993 | AAC | RUNWAY | P | 0 | 199,950.00 | 04/03/2012 | 19 | 94.00 |
| RW 18-36 (RUNWAY 18-36) | 6110 | 01/01/1967 | AC | RUNWAY | P | 0 | 199,950.00 | 04/03/2012 | 45 | 69.00 |
| TW A (TAXIWAY ALPHA) | 160 | 01/01/1967 | AC | TAXIWAY | P | 0 | 14,699.01 | 04/03/2012 | 45 | 64.00 |
| TW A (TAXIWAY ALPHA) | 205 | 01/01/1967 | AC | TAXIWAY | P | 0 | 13,738.03 | 04/03/2012 | 45 | 66.00 |
| TW A (TAXIWAY ALPHA) | 210 | 01/01/1994 | AAC | TAXIWAY | P | 0 | 6,800.00 | 04/03/2012 | 18 | 81.00 |
| TW A (TAXIWAY ALPHA) | 215 | 01/01/1962 | AC | TAXIWAY | P | 0 | 111,200.00 | 04/03/2012 | 50 | 75.00 |
| TW A (TAXIWAY ALPHA) | 220 | 01/01/1994 | AAC | TAXIWAY | P | 0 | 14,799.10 | 04/03/2012 | 18 | 88.00 |
| TW A (TAXIWAY ALPHA) | 260 | 01/01/1967 | AC | TAXIWAY | P | 0 | 5,369.14 | 04/03/2012 | 45 | 62.00 |
| TW A (TAXIWAY ALPHA) | 270 | 01/01/1967 | AC | TAXIWAY | P | 0 | 5,369.14 | 04/03/2012 | 45 | 69.00 |
| TW A (TAXIWAY ALPHA) | 280 | 01/01/1962 | AC | TAXIWAY | P | 0 | 4,273.01 | 04/03/2012 | 50 | 80.00 |
| TW A (TAXIWAY ALPHA) | 290 | 01/01/1962 | AC | TAXIWAY | P | 0 | 4,069.14 | 04/03/2012 | 50 | 75.00 |
| TW A (TAXIWAY ALPHA) | 295 | 01/01/1970 | AC | TAXIWAY | P | 0 | 4,189.14 | 04/03/2012 | 42 | 56.00 |
| TW A1 (TAXIWAY A1) | 230 | 01/01/1962 | AC | TAXIWAY | P | 0 | 6,236.50 | 04/03/2012 | 50 | 66.00 |
| TW A1 (TAXIWAY A1) | 235 | 01/01/1994 | AAC | TAXIWAY | P | 0 | 2,971.07 | 04/03/2012 | 18 | 79.00 |
| TW A2 (TAXIWAY A2) | 240 | 01/01/1962 | AC | TAXIWAY | P | 0 | 11,519.91 | 04/03/2012 | 50 | 66.00 |
| TW A3 (TAXIWAY A3) | 250 | 01/01/1962 | AC | TAXIWAY | P | 0 | 6,134.57 | 04/03/2012 | 50 | 61.00 |
| TW A3 (TAXIWAY A3) | 255 | 01/01/1994 | AAC | TAXIWAY | P | 0 | 2,869.14 | 04/03/2012 | 18 | 85.00 |
| TW B (TAXIWAY BRAVO) | 105 | 01/01/1967 | AC | TAXIWAY | P | 0 | 192,408.00 | 04/03/2012 | 45 | 69.00 |
| TW B (TAXIWAY BRAVO) | 180 | 01/01/1967 | AC | TAXIWAY | P | 0 | 12,661.15 | 04/03/2012 | 45 | 69.00 |
| TW B (TAXIWAY BRAVO) | 185 | 01/01/1970 | PCC | TAXIWAY | P | 0 | 851.79 | 04/03/2012 | 42 | 84.00 |
| TW B1 (TAXIWAY B1) | 110 | 01/01/1967 | AAC | TAXIWAY | P | 0 | 20,222.62 | 04/03/2012 | 45 | 76.00 |
| TW B2 (TAXIWAY B2) | 120 | 01/01/1967 | AC | TAXIWAY | P | 0 | 21,223.34 | 04/03/2012 | 45 | 43.00 |
| TW B3 (TAXIWAY B3) | 130 | 01/01/1967 | AC | TAXIWAY | P | 0 | 12,237.28 | 04/03/2012 | 45 | 39.00 |

Date: 4 /5/2012

Section Condition Report

2 of 3

Pavement Database: NetworkID: X51

| Branch ID | Section ID | Last Const. Date | Surface | Use | Rank | Lanes | True Area (SqFt) | Last Inspection Date | Age At Inspection | PCI |
|--------------------|------------|------------------|---------|---------|------|-------|------------------|----------------------|-------------------|--------|
| TW B4 (TAXIWAY B4) | 140 | 01/01/1967 | AC | TAXIWAY | P | 0 | 15,568.97 | 04/03/2012 | 45 | 40.00 |
| TW B5 (TAXIWAY B5) | 150 | 01/01/1967 | AC | TAXIWAY | P | 0 | 6,210.97 | 04/03/2012 | 45 | 60.00 |
| TW B5 (TAXIWAY B5) | 155 | 01/01/2009 | AAC | TAXIWAY | P | 0 | 10,114.48 | 04/03/2012 | 3 | 100.00 |

Date: 4 /5/2012

Section Condition Report

3 of 3

Pavement Database:

| Age Category | Average Age At Inspection | Total Area (SqFt) | Number of Sections | Arithmetic Average PCI | PCI Standard Deviation | Weighted Average PCI |
|--------------|---------------------------|-------------------|--------------------|------------------------|------------------------|----------------------|
| 03-05 | 3.00 | 10,114.48 | 1 | 100.00 | 0.00 | 100.00 |
| 16-20 | 18.20 | 227,389.31 | 5 | 85.40 | 5.31 | 92.91 |
| over 40 | 46.48 | 1,261,103.19 | 23 | 65.96 | 12.03 | 70.70 |
| All | 40.10 | 1,498,606.98 | 29 | 70.48 | 14.30 | 74.27 |

APPENDIX D

PAVEMENT CONDITION PREDICTION TABLE PREDICTED PCI BY PAVEMENT USE GRAPH

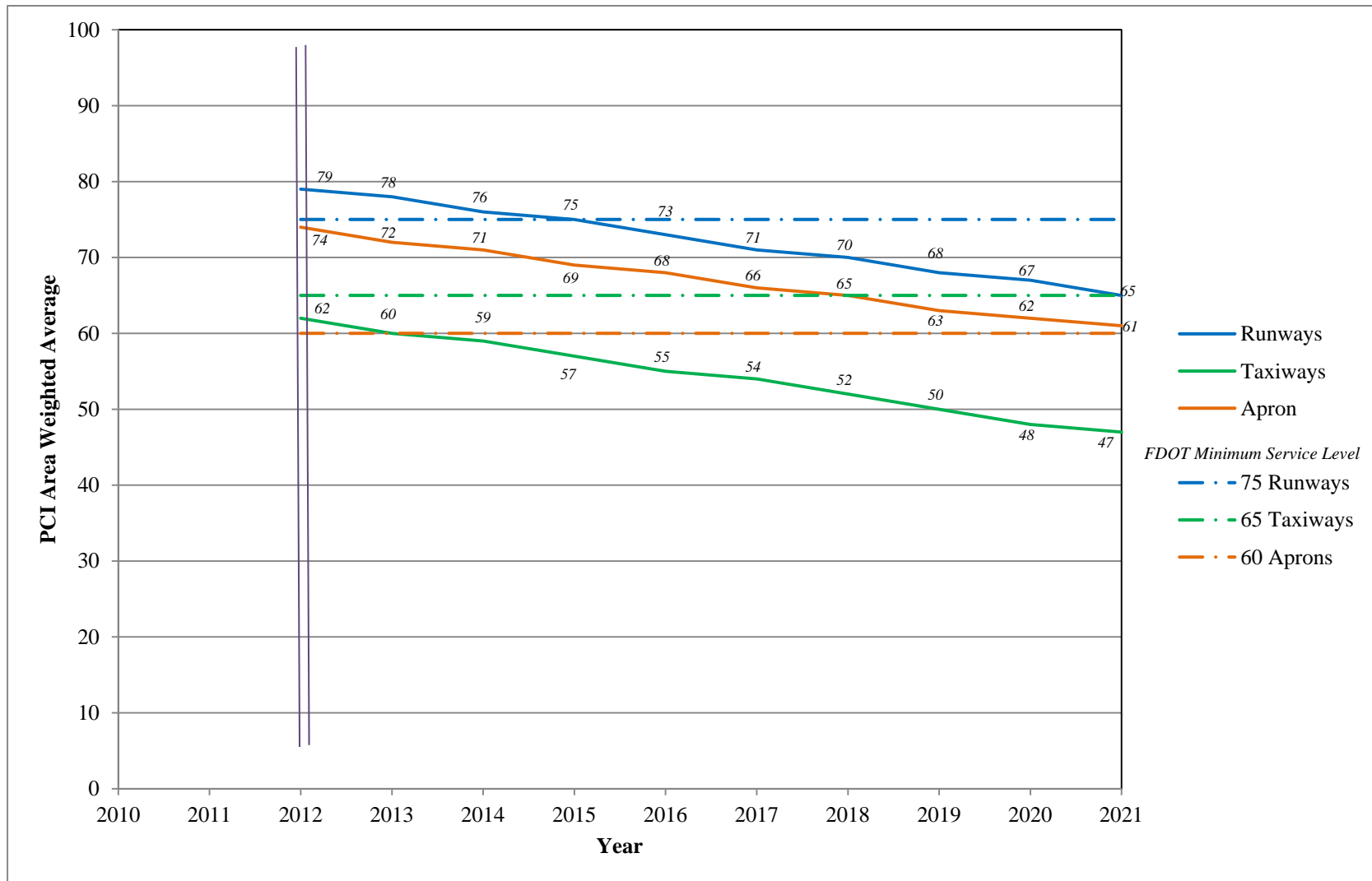
Table D-1: Pavement Condition Prediction

| Branch Name | Branch ID | Section ID | Current PCI | PCI Forecast | | | | | | | | | |
|-----------------|-----------|------------|-------------|--------------|------|------|------|------|------|------|------|------|------|
| | | | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| North Apron | AP N | 4205 | 81 | 81 | 79 | 78 | 76 | 75 | 73 | 72 | 70 | 69 | 68 |
| Northwest Apron | AP NW | 4105 | 68 | 68 | 66 | 65 | 63 | 62 | 60 | 59 | 57 | 56 | 55 |
| Runway 10-28 | RW 10-28 | 6205 | 79 | 79 | 77 | 76 | 74 | 73 | 71 | 70 | 68 | 67 | 65 |
| Runway 18-36 | RW 18-36 | 6105 | 94 | 94 | 92 | 90 | 88 | 86 | 84 | 82 | 80 | 78 | 76 |
| Runway 18-36 | RW 18-36 | 6110 | 69 | 69 | 67 | 66 | 64 | 63 | 61 | 60 | 58 | 57 | 55 |
| Taxiway Alpha | TW A | 160 | 64 | 64 | 62 | 60 | 58 | 57 | 55 | 53 | 52 | 50 | 48 |
| Taxiway Alpha | TW A | 205 | 66 | 66 | 64 | 62 | 60 | 59 | 57 | 55 | 54 | 52 | 50 |
| Taxiway Alpha | TW A | 210 | 81 | 81 | 79 | 77 | 75 | 74 | 72 | 70 | 68 | 67 | 65 |
| Taxiway Alpha | TW A | 215 | 75 | 75 | 73 | 71 | 69 | 68 | 66 | 64 | 63 | 61 | 59 |
| Taxiway Alpha | TW A | 220 | 88 | 88 | 86 | 84 | 82 | 81 | 79 | 77 | 75 | 74 | 72 |
| Taxiway Alpha | TW A | 260 | 62 | 62 | 60 | 58 | 56 | 55 | 53 | 51 | 50 | 48 | 46 |
| Taxiway Alpha | TW A | 270 | 69 | 69 | 67 | 65 | 63 | 62 | 60 | 58 | 57 | 55 | 53 |
| Taxiway Alpha | TW A | 280 | 80 | 80 | 78 | 76 | 74 | 73 | 71 | 69 | 68 | 66 | 64 |
| Taxiway Alpha | TW A | 290 | 75 | 75 | 73 | 71 | 69 | 68 | 66 | 64 | 63 | 61 | 59 |
| Taxiway Alpha | TW A | 295 | 56 | 56 | 54 | 52 | 50 | 49 | 47 | 45 | 44 | 42 | 40 |
| Taxiway A-1 | TW A1 | 230 | 66 | 66 | 64 | 62 | 60 | 59 | 57 | 55 | 54 | 52 | 50 |
| Taxiway A-1 | TW A1 | 235 | 79 | 79 | 77 | 75 | 73 | 72 | 70 | 68 | 66 | 65 | 63 |
| Taxiway A-2 | TW A2 | 240 | 66 | 66 | 64 | 62 | 60 | 59 | 57 | 55 | 54 | 52 | 50 |
| Taxiway A-3 | TW A3 | 250 | 61 | 61 | 59 | 57 | 55 | 54 | 52 | 50 | 49 | 47 | 45 |
| Taxiway A-3 | TW A3 | 255 | 85 | 85 | 83 | 81 | 79 | 78 | 76 | 74 | 72 | 71 | 69 |
| Taxiway Bravo | TW B | 105 | 69 | 69 | 67 | 65 | 63 | 62 | 60 | 58 | 57 | 55 | 53 |
| Taxiway Bravo | TW B | 180 | 69 | 69 | 67 | 65 | 63 | 62 | 60 | 58 | 57 | 55 | 53 |

Table D-1: Pavement Condition Prediction (Continued)

| Branch Name | Branch ID | Section ID | Current PCI | PCI Forecast | | | | | | | | | |
|---------------|-----------|------------|-------------|--------------|------|------|------|------|------|------|------|------|------|
| | | | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Taxiway Bravo | TW B | 185 | 84 | 83 | 81 | 78 | 76 | 73 | 71 | 68 | 65 | 63 | 60 |
| Taxiway B-1 | TW B1 | 110 | 76 | 76 | 74 | 72 | 70 | 69 | 67 | 65 | 63 | 62 | 60 |
| Taxiway B-2 | TW B2 | 120 | 43 | 43 | 41 | 39 | 37 | 36 | 34 | 32 | 31 | 29 | 27 |
| Taxiway B-3 | TW B3 | 130 | 39 | 39 | 37 | 35 | 33 | 32 | 30 | 28 | 27 | 25 | 23 |
| Taxiway B-4 | TW B4 | 140 | 40 | 40 | 38 | 36 | 34 | 33 | 31 | 29 | 28 | 26 | 24 |
| Taxiway B-5 | TW B5 | 150 | 60 | 60 | 58 | 56 | 54 | 53 | 51 | 49 | 48 | 46 | 44 |
| Taxiway B-5 | TW B5 | 155 | 100 | 100 | 98 | 96 | 94 | 93 | 91 | 89 | 87 | 86 | 84 |

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 |
|--------------------|------------------|-------------------|-----------------------------|--------------------------|-----------------------------|----------------------|------------------|------------------|------------------|
| North Apron | AP N | 4205 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 19,844.40 | SqFt | \$0.40 | \$7,937.81 |
| Northwest Apron | AP NW | 4105 | OIL SPILLAGE | N | Patching - AC Shallow | 64.60 | SqFt | \$2.90 | \$187.35 |
| Northwest Apron | AP NW | 4105 | WEATH/RAVEL | H | Microsurfacing - AC | 18.20 | SqFt | \$0.65 | \$11.81 |
| Northwest Apron | AP NW | 4105 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 112,199.10 | SqFt | \$0.40 | \$44,880.02 |
| Runway 10-28 | RW 10-28 | 6205 | WEATH/RAVEL | M | Surface Seal - Coat Tar | 2,229.20 | SqFt | \$0.40 | \$891.70 |
| Runway 10-28 | RW 10-28 | 6205 | WEATH/RAVEL | H | Microsurfacing - AC | 55.00 | SqFt | \$0.65 | \$35.74 |
| Runway 10-28 | RW 10-28 | 6205 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 25,926.10 | SqFt | \$0.40 | \$10,370.54 |
| Runway 18-36 | RW 18-36 | 6105 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 3,999.00 | SqFt | \$0.40 | \$1,599.60 |
| Runway 18-36 | RW 18-36 | 6110 | PATCHING | M | Patching - AC Deep | 46.10 | SqFt | \$4.90 | \$225.85 |
| Runway 18-36 | RW 18-36 | 6110 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 186,523.20 | SqFt | \$0.40 | \$74,609.91 |
| Taxiway Alpha | TW A | 205 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 10,990.30 | SqFt | \$0.40 | \$4,396.17 |
| Taxiway Alpha | TW A | 210 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 207.40 | SqFt | \$0.40 | \$82.96 |
| Taxiway Alpha | TW A | 215 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 48,649.60 | SqFt | \$0.40 | \$19,460.00 |
| Taxiway Alpha | TW A | 220 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 684.50 | SqFt | \$0.40 | \$273.78 |
| Taxiway Alpha | TW A | 270 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 5,369.10 | SqFt | \$0.40 | \$2,147.66 |
| Taxiway Alpha | TW A | 280 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 1,068.00 | SqFt | \$0.40 | \$427.20 |
| Taxiway Alpha | TW A | 290 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 1,017.00 | SqFt | \$0.40 | \$406.80 |
| Taxiway A-1 | TW A1 | 230 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 2,495.00 | SqFt | \$0.40 | \$998.00 |
| Taxiway A-1 | TW A1 | 235 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 297.00 | SqFt | \$0.40 | \$118.80 |
| Taxiway A-2 | TW A2 | 240 | WEATH/RAVEL | M | Surface Seal - Coat Tar | 482.70 | SqFt | \$0.40 | \$193.08 |
| Taxiway A-2 | TW A2 | 240 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 3,456.20 | SqFt | \$0.40 | \$1,382.48 |
| Taxiway A-3 | TW A3 | 255 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 287.00 | SqFt | \$0.40 | \$114.80 |
| Taxiway Bravo | TW B | 105 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 192,406.40 | SqFt | \$0.40 | \$76,963.20 |

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 Bravo | TW B | 180 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 12,661.00 | SqFt | \$0.40 | \$5,064.46 |
| Taxiway B-1 | TW B1 | 110 | WEATH/RAVEL | L | Surface Seal - Rejuvenating | 1,605.80 | SqFt | \$0.40 | \$642.34 |
| Total = | | | | | | | | | \$253,422.06 |

APPENDIX F

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

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

| Year | Branch Name | Section ID | Surface Type | Section Area (ft²) | Major M&R Costs* | PCI Before M&R | M&R Activity | PCI After M&R |
|-------------|--------------------|-------------------|---------------------|--------------------------------------|-----------------------------|---------------------------|-------------------------|--------------------------|
| 2012 | Taxiway Alpha | 160 | AC | 14,699 | \$34,219.32 | 64 | Mill and Overlay | 100 |
| 2012 | Taxiway Alpha | 260 | AC | 5,369 | \$15,430.92 | 62 | Mill and Overlay | 100 |
| 2012 | Taxiway Alpha | 295 | AC | 4,189 | \$19,136.00 | 56 | Mill and Overlay | 100 |
| 2012 | Taxiway A-3 | 250 | AC | 6,135 | \$19,305.51 | 61 | Mill and Overlay | 100 |
| 2012 | Taxiway B-2 | 120 | AC | 21,223 | \$133,494.82 | 43 | Mill and Overlay | 100 |
| 2012 | Taxiway B-3 | 130 | AC | 12,237 | \$85,942.43 | 39 | Reconstruction | 100 |
| 2012 | Taxiway B-4 | 140 | AC | 15,569 | \$97,928.84 | 40 | Mill and Overlay | 100 |
| 2012 | Taxiway B-5 | 150 | AC | 6,211 | \$21,241.53 | 60 | Mill and Overlay | 100 |
| 2013 | Taxiway Alpha | 205 | AC | 13,738 | \$32,941.62 | 64 | Mill and Overlay | 100 |
| 2013 | Taxiway A-1 | 230 | AC | 6,237 | \$14,954.14 | 64 | Mill and Overlay | 100 |
| 2013 | Taxiway A-2 | 240 | AC | 11,520 | \$27,622.92 | 64 | Mill and Overlay | 100 |
| 2015 | Northwest Apron | 4105 | AC | 282,998 | \$804,333.94 | 63 | Mill and Overlay | 100 |
| 2015 | Runway 18-36 | 6110 | AC | 199,950 | \$508,646.82 | 64 | Mill and Overlay | 100 |
| 2015 | Taxiway Alpha | 270 | AC | 5,369 | \$15,260.09 | 63 | Mill and Overlay | 100 |
| 2015 | Taxiway Bravo | 105 | AC | 192,408 | \$546,859.07 | 63 | Mill and Overlay | 100 |
| 2015 | Taxiway Bravo | 180 | AC | 12,661 | \$35,985.33 | 63 | Mill and Overlay | 100 |
| 2018 | Taxiway Alpha | 215 | AC | 111,200 | \$309,108.81 | 64 | Mill and Overlay | 100 |
| 2018 | Taxiway Alpha | 290 | AC | 4,069 | \$11,311.21 | 64 | Mill and Overlay | 100 |
| 2019 | Taxiway B-1 | 110 | AAC | 20,223 | \$64,690.22 | 63 | Mill and Overlay | 100 |

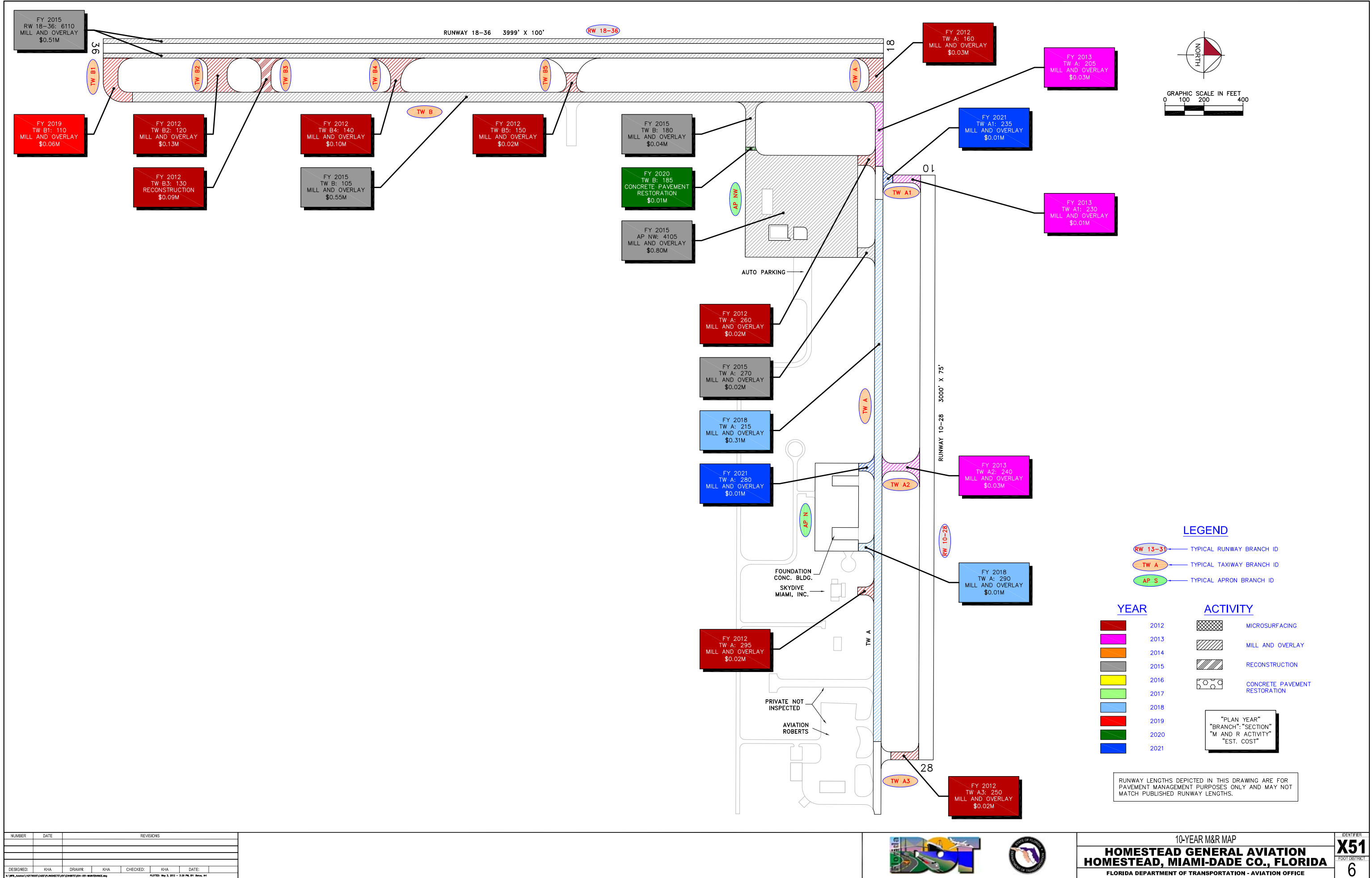
Table F-1: Major M&R Plan by Year under Unlimited Funding Scenario (Continued)

| Year | Branch Name | Section ID | Surface Type | Section Area (ft²) | Major M&R Costs* | PCI Before M&R | M&R Activity | PCI After M&R |
|--------------|--------------------|-------------------|---------------------|--------------------------------------|-----------------------------|---------------------------|-------------------------|--------------------------|
| 2020 | Taxiway Bravo | 185 | PCC | 852 | \$2,806.54 | 63 | PCC Restoration | 100 |
| 2021 | Taxiway Alpha | 280 | AC | 4,273 | \$12,979.33 | 64 | Mill and Overlay | 100 |
| 2021 | Taxiway A-1 | 235 | AAC | 2,971 | \$10,082.97 | 63 | Mill and Overlay | 100 |
| Total | | | | | \$2,824,282.38 | 60 | | 100 |

* Costs are adjusted for inflation.

APPENDIX G

10-YEAR M&R MAP



| NUMBER | DATE | REVISIONS |
|---------------|------------|--------------|
| | | |
| | | |
| DESIGNED: KHA | DRAWN: KHA | CHECKED: KHA |
| DATE: | | |



APPENDIX H

PHOTOGRAPHS

*Pavement Evaluation Report –Homestead General Aviation Airport
Florida Statewide Airfield Pavement Management Program
May 2012*



Runway 10-28, Section 6205, Sample Unit 159 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling



Runway 10-28, Section 6205, Sample Unit 149 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Runway 10-28, Section 6205, Sample Unit 107 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling



Taxiway A-1, Section 230, Sample Unit 100 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling, low severity (41) Alligator Cracking



Taxiway Alpha, Section 215, Sample Unit 117 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling, low severity (43) Block Cracking



Taxiway A-3, Section 250, Sample Unit 301 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling, low severity (50) Patching



Runway 18-36, Section 6110, Sample Unit 164 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Runway 18-36, Section 6105, Sample Unit 320 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Taxiway B-3, Section 130, Sample Unit 302 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling



Taxiway B-4, Section 140, Sample Unit 402 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling



Northwest Apron, Section 4105, Sample Unit 153 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Northwest Apron, Section 4105, Sample Unit 454 – Low severity (48) Longitudinal and Transverse Cracking, low severity (43) Block Cracking, low severity (52) Weathering and Raveling



North Apron, Section 4205, Sample Unit 202 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Taxiway Alpha, Section 295, Sample Unit 202 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling, medium severity (50) Patching

APPENDIX I

PCI RE-INSPECTION REPORT

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: AP N Name: NORTH APRON Use: APRON Area: 85,048.00SqFt

Section: 4205 of 1 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 85,048.00SqFt Length: 425.00Ft Width: 200.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 25 Surveyed: 3

Conditions: PCI: 81.00 |

Inspection Comments:

Sample Number: 202 Type: R Area: 5,000.00SqFt PCI = 86

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 68.02 Ft Comments:
52 WEATHERING/RAVELING L 400.00 SqFt Comments:

Sample Number: 400 Type: R Area: 5,000.00SqFt PCI = 75

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 216.06 Ft Comments:
52 WEATHERING/RAVELING L 2,499.98 SqFt Comments:

Sample Number: 403 Type: R Area: 5,000.00SqFt PCI = 81

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 126.03 Ft Comments:
52 WEATHERING/RAVELING L 600.00 SqFt Comments:
50 PATCHING L 44.00 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: AP NW Name: NW APRON Use: APRON Area: 282,998.48SqFt

Section: 4105 of 1 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 282,998.48SqFt Length: 600.00Ft Width: 470.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 59 Surveyed: 6

Conditions: PCI: 68.00 |

Inspection Comments:

Sample Number: 100 Type: R Area: 5,000.00SqFt PCI = 71

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 437.11 Ft Comments:
52 WEATHERING/RAVELING L 3,499.97 SqFt Comments:

Sample Number: 153 Type: R Area: 5,000.00SqFt PCI = 68

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 651.17 Ft Comments:
52 WEATHERING/RAVELING L 2,999.98 SqFt Comments:

Sample Number: 201 Type: R Area: 5,000.00SqFt PCI = 61

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 190.05 Ft Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 247.06 Ft Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 134.03 Ft Comments:
50 PATCHING L 699.99 SqFt Comments:
52 WEATHERING/RAVELING L 2,999.98 SqFt Comments:

Sample Number: 352 Type: R Area: 5,000.00SqFt PCI = 74

Sample Comments:

50 PATCHING L 64.00 SqFt Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 99.03 Ft Comments:
52 WEATHERING/RAVELING H 2.00 SqFt Comments:
52 WEATHERING/RAVELING L 500.00 SqFt Comments:
49 OIL SPILLAGE N 4.00 SqFt Comments:

Sample Number: 454 Type: R Area: 6,150.00SqFt PCI = 63

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 586.15 Ft Comments:
43 BLOCK CRACKING L 1,391.99 SqFt Comments:
52 WEATHERING/RAVELING L 1,999.98 SqFt Comments:

Sample Number: 602 Type: R Area: 5,000.00SqFt PCI = 71

Sample Comments:

50 PATCHING L 54.00 SqFt Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 409.10 Ft Comments:
52 WEATHERING/RAVELING L 350.00 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: RW 10-28 Name: RUNWAY 10-28 Use: RUNWAY Area: 224,925.00SqFt

Section: 6205 of 1 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 224,925.00SqFt Length: 2,999.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 60 Surveyed: 12

Conditions: PCI: 79.00 |

Inspection Comments:

Sample Number: 102 Type: R Area: 3,750.00SqFt PCI = 71

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 59.02 | Ft | Comments: |
| 50 | PATCHING | L | 649.99 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 400.00 | SqFt | Comments: |

Sample Number: 107 Type: R Area: 3,750.00SqFt PCI = 66

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 40.01 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | M | 150.00 | SqFt | Comments: |
| 50 | PATCHING | L | 649.99 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 649.99 | SqFt | Comments: |

Sample Number: 113 Type: R Area: 3,750.00SqFt PCI = 78

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 44.01 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | M | 50.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 600.00 | SqFt | Comments: |

Sample Number: 119 Type: R Area: 3,750.00SqFt PCI = 80

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 43.01 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | M | 50.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 400.00 | SqFt | Comments: |

Sample Number: 125 Type: R Area: 3,750.00SqFt PCI = 84

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 30.01 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 500.00 | SqFt | Comments: |

Sample Number: 131 Type: R Area: 3,750.00SqFt PCI = 76

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 54.01 | Ft | Comments: |
| 50 | PATCHING | L | 60.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 12.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 350.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | M | 50.00 | SqFt | Comments: |

Sample Number: 137 Type: R Area: 3,750.00SqFt PCI = 79

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 88.02 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | M | 50.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 450.00 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

| | | | | | | |
|------------------|-------------------------|----------|---|-------|--------------|-----------|
| Sample Number: | 143 | Type: | R | Area: | 3,750.00SqFt | PCI = 84 |
| Sample Comments: | | | | | | |
| 48 | LONGITUDINAL/TRANSVERSE | CRACKING | | L | 77.02 Ft | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 500.00 SqFt | Comments: |

| | | | | | | |
|------------------|-------------------------|----------|---|-------|--------------|-----------|
| Sample Number: | 149 | Type: | R | Area: | 3,750.00SqFt | PCI = 86 |
| Sample Comments: | | | | | | |
| 48 | LONGITUDINAL/TRANSVERSE | CRACKING | | L | 47.01 Ft | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 350.00 SqFt | Comments: |

| | | | | | | |
|------------------|-------------------------|----------|---|-------|--------------|-----------|
| Sample Number: | 154 | Type: | R | Area: | 3,750.00SqFt | PCI = 86 |
| Sample Comments: | | | | | | |
| 48 | LONGITUDINAL/TRANSVERSE | CRACKING | | L | 104.03 Ft | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 250.00 SqFt | Comments: |

| | | | | | | |
|------------------|-------------------------|----------|---|-------|--------------|-----------|
| Sample Number: | 157 | Type: | R | Area: | 3,750.00SqFt | PCI = 85 |
| Sample Comments: | | | | | | |
| 48 | LONGITUDINAL/TRANSVERSE | CRACKING | | L | 108.03 Ft | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 300.00 SqFt | Comments: |

| | | | | | | |
|------------------|-------------------------|----------|---|-------|--------------|-----------|
| Sample Number: | 159 | Type: | R | Area: | 3,750.00SqFt | PCI = 74 |
| Sample Comments: | | | | | | |
| 52 | WEATHERING/RAVELING | | | M | 96.00 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | | | H | 11.00 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 65.00 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 50.00 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 110.00 SqFt | Comments: |
| 48 | LONGITUDINAL/TRANSVERSE | CRACKING | | L | 87.02 Ft | Comments: |
| 52 | WEATHERING/RAVELING | | | L | 200.00 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: RW 18-36 Name: RUNWAY 18-36 Use: RUNWAY Area: 399,900.00SqFt

Section: 6105 of 2 From: - To: - Last Const.: 1/1/1993
Surface: AAC Family: DEFAULT Zone: Category: Rank: P
Area: 199,950.00SqFt Length: 3,999.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 40 Surveyed: 8

Conditions: PCI: 94.00 |

Inspection Comments:

Sample Number: 302 Type: R Area: 5,000.00SqFt PCI = 96

Sample Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Sample Number: 305 Type: R Area: 5,000.00SqFt PCI = 96

Sample Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Sample Number: 308 Type: R Area: 5,000.00SqFt PCI = 93

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 12.00 Ft Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Sample Number: 314 Type: R Area: 5,000.00SqFt PCI = 93

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 10.00 Ft Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Sample Number: 320 Type: R Area: 5,000.00SqFt PCI = 93

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 9.00 Ft Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Sample Number: 325 Type: R Area: 5,000.00SqFt PCI = 96

Sample Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Sample Number: 329 Type: R Area: 5,000.00SqFt PCI = 94

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 3.00 Ft Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Sample Number: 335 Type: R Area: 5,000.00SqFt PCI = 92

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 29.01 Ft Comments:

52 WEATHERING/RAVELING L 100.00 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: RW 18-36 Name: RUNWAY 18-36 Use: RUNWAY Area: 399,900.00SqFt

Section: 6110 of 2 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 199,950.00SqFt Length: 7,998.00Ft Width: 25.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 40 Surveyed: 7

Conditions: PCI: 69.00 |

Inspection Comments:

Sample Number: 112 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 264.07 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 128 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 256.07 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 164 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 191.05 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 504 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 352.09 Ft Comments:

Sample Number: 540 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 204.05 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 560 Type: R Area: 5,000.00SqFt PCI = 64

Sample Comments:

50 PATCHING M 4.00 SqFt Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 101.03 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 576 Type: R Area: 5,000.00SqFt PCI = 74

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 237.06 Ft Comments:
52 WEATHERING/RAVELING L 2,649.98 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 160 of 10 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 14,699.01SqFt Length: 195.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 4 Surveyed: 1

Conditions: PCI:64.00 |

Inspection Comments:

Sample Number: 601 Type: R Area: 3,736.41SqFt PCI = 64

Sample Comments:

| | | | | |
|----|----------------------------------|---|---------------|-----------|
| 50 | PATCHING | L | 333.00 SqFt | Comments: |
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 71.02 Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 3,736.38 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 205 of 10 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 13,738.03SqFt Length: 340.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 3 Surveyed: 1

Conditions: PCI:66.00 |

Inspection Comments:

Sample Number: 102 Type: R Area: 5,200.00SqFt PCI = 66

Sample Comments:

| | | | | |
|----|----------------------------------|---|---------------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 231.06 Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 4,159.97 SqFt | Comments: |
| 50 | PATCHING | L | 180.00 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 210 of 10 From: - To: - Last Const.: 1/1/1994
Surface: AAC Family: DEFAULT Zone: Category: Rank: P
Area: 6,800.00SqFt Length: 170.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 2 Surveyed: 1

Conditions: PCI: 81.00 |

Inspection Comments:

Sample Number: 104 Type: R Area: 4,000.00SqFt PCI = 81

Sample Comments:

| | | | | | |
|----|----------------------------------|---|--------|------|-----------|
| 52 | WEATHERING/RAVELING | L | 30.00 | SqFt | Comments: |
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 87.02 | Ft | Comments: |
| 50 | PATCHING | L | 180.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 92.00 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 215 of 10 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 111,200.00SqFt Length: 2,780.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 28 Surveyed: 4

Conditions: PCI: 75.00 |

Inspection Comments:

Sample Number: 108 Type: R Area: 4,000.00SqFt PCI = 77

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 4.00 Ft Comments:
52 WEATHERING/RAVELING L 1,999.98 SqFt Comments:

Sample Number: 117 Type: R Area: 4,000.00SqFt PCI = 70

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 54.01 Ft Comments:
43 BLOCK CRACKING L 133.00 SqFt Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 137.04 Ft Comments:
52 WEATHERING/RAVELING L 1,999.98 SqFt Comments:

Sample Number: 123 Type: R Area: 4,000.00SqFt PCI = 77

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 139.04 Ft Comments:
52 WEATHERING/RAVELING L 1,499.99 SqFt Comments:

Sample Number: 129 Type: R Area: 4,000.00SqFt PCI = 77

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 47.01 Ft Comments:
52 WEATHERING/RAVELING L 1,499.99 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 220 of 10 From: - To: - Last Const.: 1/1/1994
Surface: AAC Family: DEFAULT Zone: Category: Rank: P
Area: 14,799.10SqFt Length: 370.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 3 Surveyed: 1

Conditions: PCI:88.00 |

Inspection Comments:

Sample Number: 133 Type: R Area: 4,800.00SqFt PCI = 88

Sample Comments:

| | | | | |
|----|----------------------------------|---|-------------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 94.02 Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 160.00 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 62.00 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 260 of 10 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 5,369.14SqFt Length: 100.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1
Conditions: PCI:62.00 |
Inspection Comments:

Sample Number: 100 Type: R Area: 5,369.14SqFt PCI = 62

Sample Comments:

| | | | | |
|----|----------------------------------|---|---------------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 248.06 Ft | Comments: |
| 52 | WEATHERING/RAVELING | M | 804.99 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 4,562.96 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 270 of 10 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 5,369.14SqFt Length: 100.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1
Conditions: PCI: 69.00 |
Inspection Comments:

Sample Number: 200 Type: R Area: 5,369.14SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 265.07 Ft Comments:
52 WEATHERING/RAVELING L 5,369.10 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 280 of 10 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 4,273.01SqFt Length: 80.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1
Conditions: PCI:80.00 |
Inspection Comments:

Sample Number: 300 Type: R Area: 4,273.01SqFt PCI = 80
Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 124.03 Ft Comments:
52 WEATHERING/RAVELING L 1,067.99 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 290 of 10 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 4,069.14SqFt Length: 80.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI:75.00 |

Inspection Comments:

Sample Number: 400 Type: R Area: 4,069.14SqFt PCI = 75

Sample Comments:

| | | | | | |
|----|----------------------------------|---|----------|------|-----------|
| 50 | PATCHING | L | 180.00 | SqFt | Comments: |
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 114.03 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 1,016.99 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A Name: TAXIWAY ALPHA Use: TAXIWAY Area: 184,505.71SqFt

Section: 295 of 10 From: - To: - Last Const.: 1/1/1970
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 4,189.14SqFt Length: 80.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI:56.00 |

Inspection Comments:

Sample Number: 500 Type: R Area: 4,189.14SqFt PCI = 56

Sample Comments:

| | | | | | |
|----|----------------------------------|---|----------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 133.03 | Ft | Comments: |
| 50 | PATCHING | L | 355.50 | SqFt | Comments: |
| 50 | PATCHING | M | 2.00 | SqFt | Comments: |
| 45 | DEPRESSION | L | 72.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | M | 216.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 1,674.99 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A1 Name: TAXIWAY A1 Use: TAXIWAY Area: 9,207.57SqFt

Section: 230 of 2 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 6,236.50SqFt Length: 150.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI: 66.00 |

Inspection Comments:

Sample Number: 100 Type: R Area: 6,236.50SqFt PCI = 66

Sample Comments:

| | | | | |
|----|----------------------------------|---|---------------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 343.09 Ft | Comments: |
| 41 | ALLIGATOR CRACKING | L | 10.00 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 2,494.98 SqFt | Comments: |
| 50 | PATCHING | L | 180.00 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A1 Name: TAXIWAY A1 Use: TAXIWAY Area: 9,207.57SqFt

Section: 235 of 2 From: - To: - Last Const.: 1/1/1994
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 2,971.07SqFt Length: 50.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1
Conditions: PCI: 79.00 |
Inspection Comments:

Sample Number: 101 Type: R Area: 2,971.07SqFt PCI = 79

Sample Comments:

| | | | | |
|----|----------------------------------|---|-------------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 143.04 Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 297.00 SqFt | Comments: |
| 45 | DEPRESSION | L | 10.00 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A2 Name: TAXIWAY A2 Use: TAXIWAY Area: 11,519.91SqFt

Section: 240 of 1 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 11,519.91SqFt Length: 250.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 2 Surveyed: 1

Conditions: PCI:66.00 |

Inspection Comments:

Sample Number: 201 Type: R Area: 4,773.01SqFt PCI = 66

Sample Comments:

| | | | | |
|----|----------------------------------|---|---------------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 331.08 Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 1,431.99 SqFt | Comments: |
| 52 | WEATHERING/RAVELING | M | 200.00 SqFt | Comments: |
| 50 | PATCHING | L | 180.00 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A3 Name: TAXIWAY A3 Use: TAXIWAY Area: 9,003.71SqFt

Section: 250 of 2 From: - To: - Last Const.: 1/1/1962
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 6,134.57SqFt Length: 150.00Ft Width: 40.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI:61.00 |

Inspection Comments:

Sample Number: 301 Type: R Area: 6,134.57SqFt PCI = 61

Sample Comments:

| | | | |
|-------------------------------------|---|---------------|-----------|
| 50 PATCHING | L | 180.00 SqFt | Comments: |
| 48 LONGITUDINAL/TRANSVERSE CRACKING | L | 247.06 Ft | Comments: |
| 52 WEATHERING/RAVELING | L | 2,453.98 SqFt | Comments: |
| 48 LONGITUDINAL/TRANSVERSE CRACKING | L | 96.02 Ft | Comments: |
| 52 WEATHERING/RAVELING | M | 30.00 SqFt | Comments: |
| 43 BLOCK CRACKING | L | 48.00 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW A3 Name: TAXIWAY A3 Use: TAXIWAY Area: 9,003.71SqFt

Section: 255 of 2 From: - To: - Last Const.: 1/1/1994
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 2,869.14SqFt Length: 50.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1
Conditions: PCI:85.00 |
Inspection Comments:

Sample Number: 300 Type: R Area: 2,869.14SqFt PCI = 85
Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 71.02 Ft Comments:
52 WEATHERING/RAVELING L 287.00 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B Name: TAXIWAY BRAVO Use: TAXIWAY Area: 205,920.94SqFt

Section: 105 of 3 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 192,408.00SqFt Length: 3,848.16Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 39 Surveyed: 4

Conditions: PCI: 69.00 |

Inspection Comments:

Sample Number: 103 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 319.08 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 116 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 279.07 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 123 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 262.07 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Sample Number: 132 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 195.05 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B Name: TAXIWAY BRAVO Use: TAXIWAY Area: 205,920.94SqFt

Section: 180 of 3 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: DEFAULT Zone: Category: Rank: P
Area: 12,661.15SqFt Length: 240.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 3 Surveyed: 1
Conditions: PCI: 69.00 |
Inspection Comments:

Sample Number: 801 Type: R Area: 5,000.00SqFt PCI = 69

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 421.11 Ft Comments:
52 WEATHERING/RAVELING L 4,999.96 SqFt Comments:

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B Name: TAXIWAY BRAVO Use: TAXIWAY Area: 205,920.94SqFt

Section: 185 of 3 From: - To: - Last Const.: 1/1/1970
Surface: PCC Family: DEFAULT Zone: Category: Rank: P
Area: 851.79SqFt Length: 50.00Ft Width: 16.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 1 Surveyed: 1
Conditions: PCI:84.00 |
Inspection Comments:

| | | | | |
|----------------------|---------|------------|-------|-----------|
| Sample Number: 803 | Type: R | Area: 4.00 | Slabs | PCI = 84 |
| Sample Comments: | | | | |
| 74 JOINT SPALLING | L | 4.00 | Slabs | Comments: |
| 65 JOINT SEAL DAMAGE | L | 4.00 | Slabs | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B1 Name: TAXIWAY B1 Use: TAXIWAY Area: 20,222.62SqFt

Section: 110 of 1 From: - To: - Last Const.: 1/1/1967
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 20,222.62SqFt Length: 260.00Ft Width: 75.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 5 Surveyed: 1

Conditions: PCI: 76.00 |

Inspection Comments:

Sample Number: 202 Type: R Area: 3,777.94SqFt PCI = 76

Sample Comments:

| | | | | |
|----|----------------------------------|---|-------------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 133.03 Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 300.00 SqFt | Comments: |
| 50 | PATCHING | L | 337.50 SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B2 Name: TAXIWAY B2 Use: TAXIWAY Area: 21,223.34SqFt

Section: 120 of 1 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 21,223.34SqFt Length: 200.00Ft Width: 100.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 4 Surveyed: 1

Conditions: PCI:43.00 |

Inspection Comments:

Sample Number: 201 Type: R Area: 5,038.11SqFt PCI = 43

Sample Comments:

| | | | | | |
|----|----------------------------------|---|----------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 146.04 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | M | 2,518.98 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 2,518.98 | SqFt | Comments: |
| 50 | PATCHING | L | 450.00 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B3 Name: TAXIWAY B3 Use: TAXIWAY Area: 12,237.28SqFt

Section: 130 of 1 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 12,237.28SqFt Length: 240.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 3 Surveyed: 1
Conditions: PCI: 39.00 |
Inspection Comments:

Sample Number: 302 Type: R Area: 4,823.01SqFt PCI = 39

Sample Comments:

| | | | | | |
|----|----------------------------------|---|----------|------|-----------|
| 50 | PATCHING | L | 225.00 | SqFt | Comments: |
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 238.06 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 1,928.98 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | M | 2,893.98 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B4 Name: TAXIWAY B4 Use: TAXIWAY Area: 15,568.97SqFt

Section: 140 of 1 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 15,568.97SqFt Length: 250.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 3 Surveyed: 1

Conditions: PCI:40.00 |

Inspection Comments:

Sample Number: 402 Type: R Area: 4,641.61SqFt PCI = 40

Sample Comments:

| | | | | | |
|----|----------------------------------|---|----------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 296.08 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | H | 162.00 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | L | 3,712.97 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | M | 765.99 | SqFt | Comments: |
| 50 | PATCHING | L | 234.00 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B5 Name: TAXIWAY B5 Use: TAXIWAY Area: 16,325.45SqFt

Section: 150 of 2 From: - To: - Last Const.: 1/1/1967
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 6,210.97SqFt Length: 100.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 2 Surveyed: 1

Conditions: PCI:60.00 |

Inspection Comments:

Sample Number: 502 Type: R Area: 2,841.83SqFt PCI = 60

Sample Comments:

| | | | | | |
|----|----------------------------------|---|----------|------|-----------|
| 48 | LONGITUDINAL/TRANSVERSE CRACKING | L | 42.01 | Ft | Comments: |
| 52 | WEATHERING/RAVELING | L | 2,557.63 | SqFt | Comments: |
| 52 | WEATHERING/RAVELING | M | 284.18 | SqFt | Comments: |
| 50 | PATCHING | L | 234.00 | SqFt | Comments: |

Re-inspection Report

FDOT_COMB

Report Generated Date: 4/5/2012

Site Name:

Network: X51 Name: HOMESTEAD GENERAL AVIATION AIRPORT

Branch: TW B5 Name: TAXIWAY B5 Use: TAXIWAY Area: 16,325.45SqFt

Section: 155 of 2 From: - To: - Last Const.: 1/1/2009
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 10,114.48SqFt Length: 100.00Ft Width: 100.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 4/3/2012 Total Samples: 2 Surveyed: 1
Conditions: PCI:100.00 |
Inspection Comments:

Sample Number: 501 Type: R Area: 5,169.18SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>