

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION OFFICE

Statewide Airfield Pavement Management Program

District 3 Report

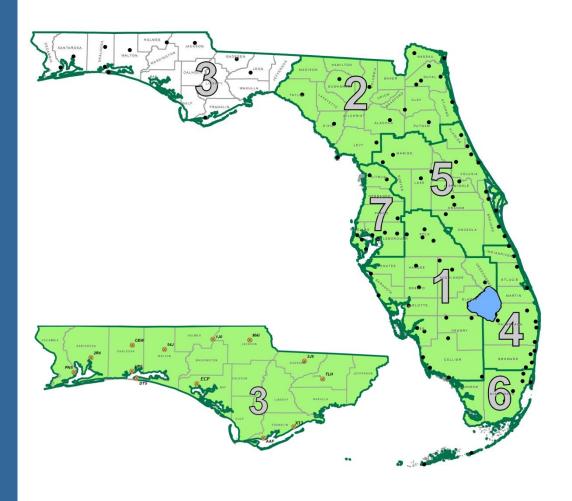


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EXECUTIVE SUMMARY

Airfield pavement facilities represent a large capital investment in the Florida Airport System. Timely airport maintenance and strategic rehabilitation are essential as repair costs increase significantly in proportion to deterioration. Airport distresses can also contribute to the development of loose debris and decrease rideability quality, which can be a significant safety concern for aircraft.

In 2010, the FDOT Aviation Office selected a Consultant team consisting of Kimley-Horn and Associates, Inc. and their Subconsultants, AMEC, Penuel Consulting, LLC 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. Pavement condition surveys were performed for airside pavements for the following airports located in District 3:

- 1J0 Tri-County Airport
- 2J9 Quincy Municipal Airport
- 2R4 Peter Prince Field
- 54J DeFuniak Springs Municipal Airport
- AAF Apalachicola Regional Airport
- CEW Bob Sikes Airport
- DTS Destin-Fort Walton Beach Airport
- MAI Marianna Municipal Airport
- PNS Pensacola Gulf Coast Regional Airport
- TLH Tallahassee Regional Airport
- X13 Carrabelle-Thompson Airport

Northwest Florida Regional Airport, Eglin AFB (VPS), declined to participate in the FDOT SAPMP and therefore was not inspected as part of this update. Northwest Florida Beaches International Airport (ECP), which is managed by the Panama City-Bay County Airport and Industrial District, was recently constructed in 2009 and was also therefore not inspected as part of this update.

District 3's overall PCI is at a 70, which corresponds to a 'Fair' condition. **Table I: Condition Summary by Airport** below represents the results of the PCI inspection at each airport within the District. Average PCI values for the airports in District 3 ranged from 33 (Very Poor) to 92 (Good). Specific individual airport results are identified in individual airport reports provided to the airports. **Table II: Runway Condition Summary by Airport** indicates the PCI values for every runway within the District, grouped by airport. **Figure I-A: Runway Condition** graphically depicts the percentage of the District's runways below the FDOT Minimum PCI, and **Figure I-B: Runway Pavement Condition Comparison to FDOT Minimum PCI** shows the PCIs of the District's runways in comparison to the FDOT Minimum PCI.

Table I: Condition Summary by Airport

FAA Identifier	Airport Name		Runway PCI	Taxiway PCI	Apron PCI	Overall PCI	Overall Condition Rating
1J0	Tri-County Airport	GA	70	93	75	74	Satisfactory
2J9	Quincy Municipal Airport	GA	62	61	n/a	62	Fair
2R4	Peter Prince Field	GA	76	78	76	76	Satisfactory
54J	DeFuniak Springs Municipal Airport	GA	96	87	91	92	Good
AAF	Apalachicola Regional Airport	GA	69	58	50	62	Fair
CEW	Bob Sikes Airport	GA	94	76	53	79	Satisfactory
DTS	Destin-Fort Walton Beach Airport	GA	58	69	55	60	Fair
MAI	Marianna Municipal Airport	GA	55	31	21	33	Very Poor
PNS	Pensacola Gulf Coast Regional Airport	PR	86	86	65	79	Satisfactory
TLH	Tallahassee Regional Airport	PR	71	71	81	75	Satisfactory
X13	Carrabelle-Thompson Airport		77	57	65	74	Satisfactory
	District 3 O	verall =	74	70	63	70	Fair

Table II: Runway Condition Summary by Airport

FAA Identifier	Airport Name	Airport Type	Runway Facility	Length	Width	Weighted Average PCI	Below Critical	Below FDOT
1J0	Tri-County Airport	GA	1-19	4,000	75	70		X
2J9	Quincy Municipal Airport	GA	14-32	2,964	75	62	X	X
2R4	Peter Prince Field	GA	18-36	3,701	75	76		
54J	DeFuniak Springs Municipal Airport	GA	9-27	4,146	60	96		
AAF	Apalachicola Regional Airport	GA	13-31	5,251	150	66		X
AAF	Apalachicola Regional Airport	GA	18-36	5,251	150	68		X
AAF	Apalachicola Regional Airport	GA	6-24	5,271	150	73		X
CEW	Bob Sikes Airport	GA	17-35	8,004	150	94		
DTS	Destin - Fort Walton Beach Airport	GA	14-32	5,001	100	58	X	X
MAI	Marianna Municipal Airport	GA	18-36	4,896	100	69		X
MAI	Marianna Municipal Airport	GA	8-26	4,895	100	42	X	X
PNS	Pensacola Gulf Coast Regional Airport	PR	17-35	7,004	150	88		
PNS	Pensacola Gulf Coast Regional Airport	PR	8-26	7,000	150	84		
TLH	Tallahassee Regional Airport	PR	18-36	6,076	150	97		
TLH	Tallahassee Regional Airport	PR	9-27	8,000	150	52	X	X
X13	Carrabelle-Thompson Airport	GA	5-23	4,000	75	77		
			W	eighted A	verage =	74		56%

Figure I-A: Runway Condition

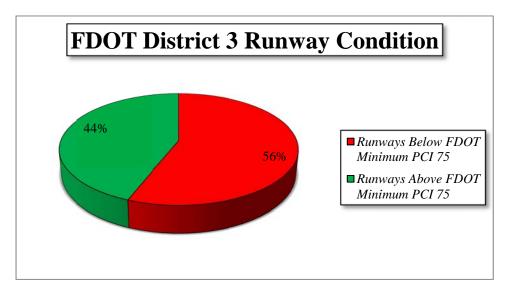
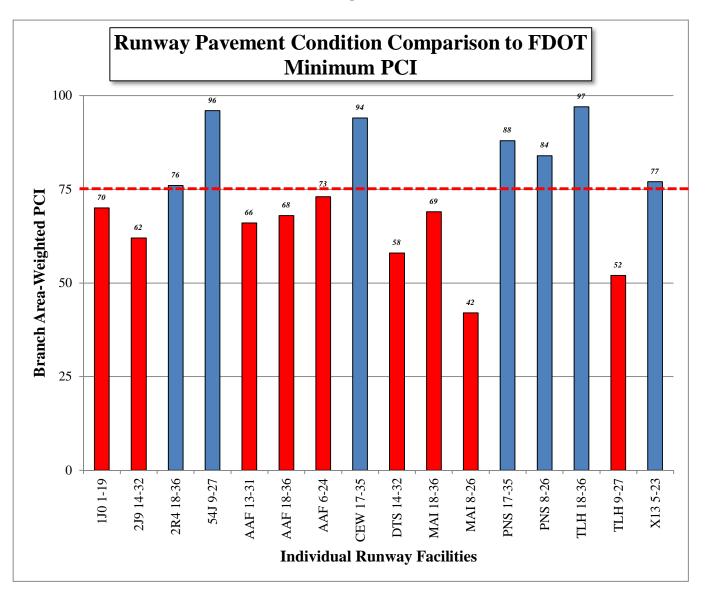


Figure I-B: Runway Pavement Condition Comparison to FDOT Minimum PCI



Pavement use has an influence on the pavement condition of each facility. For example, the amount and type of distresses observed on a primary runway can vary from a maintenance apron based on frequency and variety of traffic loads experienced. **Table III: Summary of Area by Use by Airport** provides a breakdown of the airport areas by pavement use. **Figure II: PCI by Pavement Use by Airport** graphically shows the PCI for each pavement use at each airport.

Table III: Summary of Area by Use by Airport

FAA Identifier	Airport Name	Type	Runway Area (SqFt)	Taxiway Area (SqFt)	Apron Area (SqFt)	Total Area (SqFt)
1J0	Tri-County Airport	GA	301,050	72,211	124,605	497,866
2J9	Quincy Municipal Airport	GA	223,200	66,770	n/a	289,970
2R4	Peter Prince Field	GA	277,500	255,250	511,630	1,044,380
54J	DeFuniak Springs Municipal Airport	GA	248,940	232,405	147,640	628,985
AAF	Apalachicola Regional Airport	GA	2,304,750	902,394	923,000	4,130,144
CEW	Bob Sikes Airport	GA	1,200,000	644,239	634,890	2,479,129
DTS	Destin-Fort Walton Beach Airport	GA	499,904	372,180	606,685	1,478,769
MAI	Marianna Municipal Airport	GA	970,000	561,278	1,547,444	3,078,722
PNS	Pensacola Gulf Coast Regional Airport	PR	2,078,400	2,308,200	2,191,375	6,577,975
TLH	Tallahassee Regional Airport		2,120,550	2,747,885	3,189,190	8,057,625
X13	Carrabelle-Thompson Airport		303,000	10,000	71,986	384,986
	District 3 C	verall =	10,527,294	8,172,812	9,948,445	28,648,551

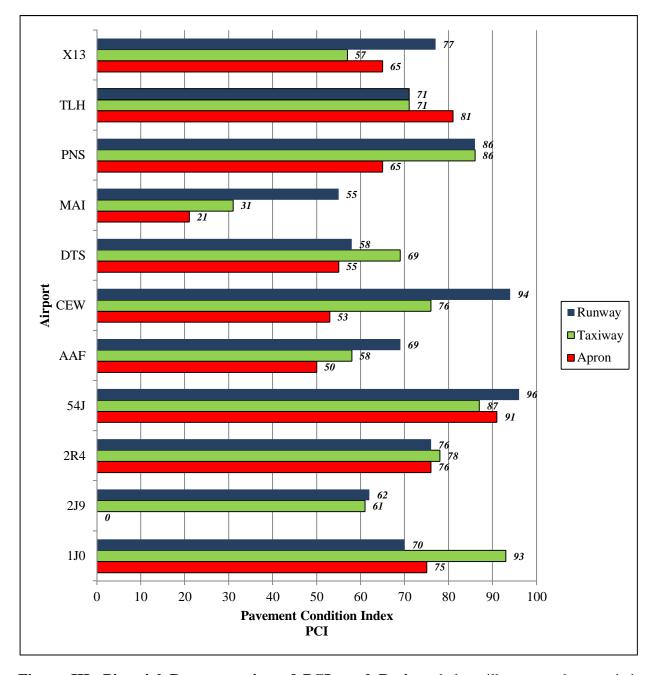
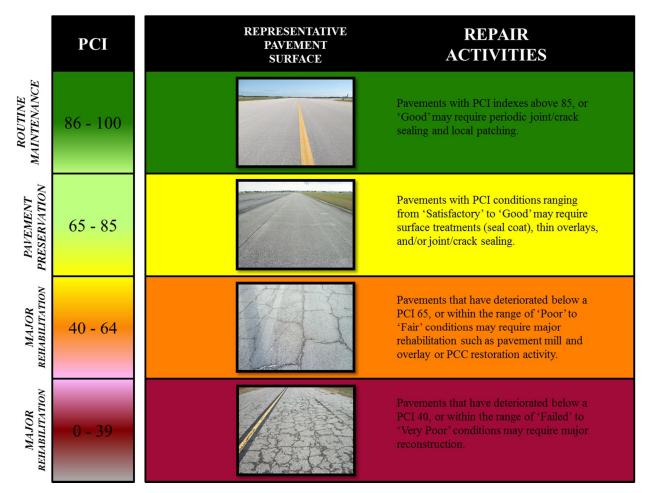


Figure II: PCI by Pavement Use by Airport

Figure III: Pictorial Representation of PCIs and Ratings below illustrates characteristic pavement surfaces associated with various ranges of PCIs and Ratings, along with typical repair activities for the PCI ranges.

Figure III: Pictorial Representation of PCIs and Ratings



The immediate major rehabilitation 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 in District 3 are summarized in **Table IV**: **Summary of Immediate Major Rehabilitation Needs**.

Table IV: Summary of Immediate Major Rehabilitation Needs

FAA Identifier	Airport Name	Туре	Current Average PCI	Current Condition Rating	Immediate Major Rehabilitation Need Costs
1J0	Tri-County Airport	GA	74	Satisfactory	\$122,010.56
2J9	Quincy Municipal Airport	GA	62	Fair	\$771,465.26
2R4	Peter Prince Field	GA	76	Satisfactory	\$459,966.76
54J	DeFuniak Springs Municipal Airport	GA	92	Good	\$0.00
AAF	Apalachicola Regional Airport	GA	62	Fair	\$13,006,872.07
CEW	Bob Sikes Airport	GA	79	Satisfactory	\$4,286,192.34
DTS	Destin-Fort Walton Beach Airport	GA	60	Fair	\$5,291,803.29
MAI	Marianna Municipal Airport	GA	33	Very Poor	\$30,493,570.54
PNS	Pensacola Gulf Coast Regional Airport	PR	79	Satisfactory	\$9,824,952.74
TLH	Tallahassee Regional Airport	PR	75	Satisfactory	\$14,897,729.14
X13	Carrabelle-Thompson Airport	GA	74	Satisfactory	\$98,352.53
	District 3	Overall =	70	Fair	\$79,252,915.24

The identified major rehabilitation projects summarized above and further explained in each individual airport report have been determined based on the Critical Pavement Condition Index Criteria. The criteria establishes recommended minimum PCI values that pavement facilities should not deteriorate past based on facility use and airport type.

A forecast of major rehabilitation needs for a 10-year period was developed using an unlimited budget. The analysis identified ongoing maintenance needs and major rehabilitation during that interval. The resulting major rehabilitation needs, excluding maintenance needs, by airport are provided in **Table V: Summary of 10-Year Major Rehabilitation Costs by Airport** below.

Table V: Summary of 10-Year Major Rehabilitation Costs by Airport

FAA Identifier	Airport Name	Туре	Current Average PCI	Current Condition Rating	10-Year Major Rehabilitation Need Cost
1J0	Tri-County Airport	GA	74	Satisfactory	\$981,937.38
2J9	Quincy Municipal Airport	GA	62	Fair	\$899,319.98
2R4	Peter Prince Field	GA	76	Satisfactory	\$2,249,150.85
54J	DeFuniak Springs Municipal Airport	GA	92	Good	\$203,455.31
AAF	Apalachicola Regional Airport	GA	62	Fair	\$18,018,430.42
CEW	Bob Sikes Airport	GA	79	Satisfactory	\$5,031,844.14
DTS	Destin-Fort Walton Beach Airport	GA	60	Fair	\$6,680,024.24
MAI	Marianna Municipal Airport	GA	33	Very Poor	\$31,740,681.11
PNS	Pensacola Gulf Coast Regional Airport	PR	79	Satisfactory	\$10,320,281.29
TLH	Tallahassee Regional Airport	PR	75	Satisfactory	\$28,487,084.52
X13	Carrabelle-Thompson Airport		74	Satisfactory	\$1,080,996.86
	District 3 (Overall =	70	Fair	\$105,693,206.10

The development of the aforementioned costs is based on planning level assumptions with regards to the type of rehabilitation being performed. **Table VI:** M&R Activities by Condition summarizes the M&R activities based on PCI values, as established by the FDOT.

Table VI: M&R Activities by Condition

	Activity	PCI Trigger
Maintenance	Crack Sealing and Full-Depth Patching	90
Wiannenance	Crack Searing and Pun-Depth Fatching	80
		70
	Mill and Overlay (AC) or	60
Rehabilitation	Concrete Pavement Restoration (PCC)	50
Renadilitation		40
	December ation	30
	Reconstruction	20

It is important to state that design level efforts are necessary in determining the final rehabilitative construction activity.

1. INTRODUCTION

1.1 Project Background

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 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, Inc. and their Subconsultants, AMEC, Penuel Consulting, LLC 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. Pavement condition surveys were performed for airside pavements for the following airports located in District 3:

- 1J0 Tri-County Airport
- 2J9 Quincy Municipal Airport
- 2R4 Peter Prince Field
- 54J DeFuniak Springs Municipal Airport
- AAF Apalachicola Regional Airport
- CEW Bob Sikes Airport
- DTS Destin-Fort Walton Beach Airport
- MAI Marianna Municipal Airport
- PNS Pensacola Gulf Coast Regional Airport
- TLH Tallahassee Regional Airport
- X13 Carrabelle-Thompson Airport

Northwest Florida Regional Airport, Eglin AFB (VPS), declined to participate in the FDOT SAPMP and therefore was not inspected as part of this update. Northwest Florida Beaches International Airport (ECP), which is managed by the Panama City-Bay County Airport and Industrial District, was recently constructed in 2009 and was also therefore not inspected as part of this update.

1.2 Purpose

The primary goal of the SAPMP update is to provide individual airports with pavement condition ratings as well as recommendations for immediate and long-term major rehabilitation on the

basis of pavement condition. This approach is intended to focus pavement M&R in areas where the most urgent need is with the overall goal of minimizing costs by improving pavements before they deteriorate to a point where the cost to rehabilitate is increasing at a higher rate than would have been experienced if repaired earlier.

Figure 1-1: Pavement Life Cycle 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 portion 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.

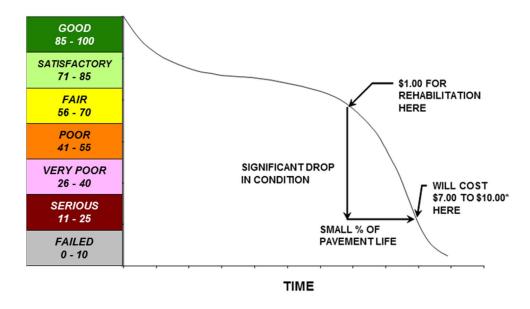


Figure 1-1: Pavement Life Cycle

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

The inspections and analysis that were done were performed in accordance with the methods identified in ASTM D 5340-04 and in the FAA Advisory Circular 150/5380-6B to comply with the FAA Airport Improvement Program (AIP) requirements. The tasks required to achieve this objectives at each airport include:

- Obtain recent construction history from the Airport to update the Pavement Inventory CADD drawings and database from the previous SAPMP update;
- Perform a visual Pavement Condition Index (PCI) survey of the airfield pavements at the Airport;

Pavement Evaluation Report – District 3 Statewide Airfield Pavement Management Program June 2012

- 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 using performance models based on condition data collected from current and previous inspections;
- Develop a 10-year M&R plan to address the pavement maintenance/rehabilitation needs;
- Estimate the anticipated costs associated with the suggested immediate and future M&R activities based on statewide average construction costs.

This document is intended to serve as a district summary of airport facility pavement condition and both immediate and long-term major rehabilitation based on needs for each airport. Furthermore, this document is intended to:

- Describe, briefly, the Florida Department of Transportation Aviation Office Statewide Airfield Pavement Management Program and the roles and responsibilities of the program's participants;
- Provide information on the pavement management principles, objectives, and methods used to update the existing program;
- Provide average results of the PCI survey at each airport based on pavement facility use, ranking, and type (i.e. Runway, Taxiway, Apron, Primary, Secondary, Tertiary, AC, AAC, APC, PCC, etc.);
- Provide the results of the M&R Analysis that identified both the immediate and 10-Year major rehabilitation project needs on an airport and district wide basis.

2. SYSTEM INVENTORY AND AIRPORT NETWORK DEFINITION DEVELOPMENT

2.1 System Inventory Update

A significant element to the development and update of the SAPMP has been to identify recent and anticipated construction activity that affects the pavement composition and performance. With cooperation from the airport facility personnel, the project team was able to gather airport specific information that included changes in pavement geometry, new or reconstructed pavements since the last inspection and anticipated pavement rehabilitation that would negate the findings of a visual inspection done in the short term. At the beginning of each phase for this update, FDOT SAPMP participants responded to the Aviation Office with project specific information on the recent and anticipated work. In addition to the construction activity, updates to pavement facility designators (i.e. re-designation, magnetic declination, and/or decommissioning) were reported.

This information was considered during the updating of pavement section areas on the individual airport Network Definition Map. The construction activity information provided by the airport is depicted on the System Inventory Update Map for each facility. This information was also included in the updates to the SAPMP specific MicroPAVER software database.

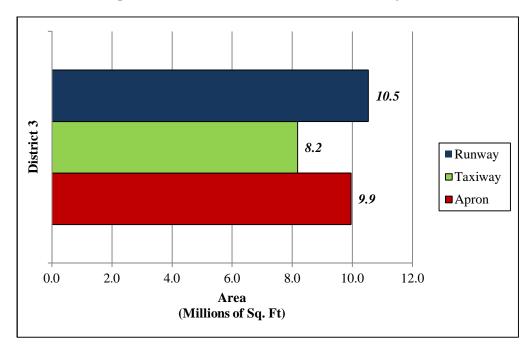
2.2 Network Definition Update

Based on the information identified in the System Inventory Map, the geometry of the Network Definition specific to the pavement area sections has been updated to reflect the changes. The purpose of developing pavement area sections is to track future pavement performance as well as to plan for future projects. The Network Definition Map categorically identifies pavement geometry, pavement composition, and sample identification. The updated areas by use for each airport are summarized in **Table 2-1: Summary of Area by Use by Airport**. **Figure 2-1: District Pavement Area by Use** below depicts the district pavement area by use, and **Figure 2-2: Pavement Area by Use by Airport** provides a breakdown of pavement area by usage at each airport.

Table 2-1: Summary of Area by Use by Airport

FAA Identifier	Airport Name	Туре	Runway Area (SqFt)	Taxiway Area (SqFt)	Apron Area (SqFt)	Total Area (SqFt)
1J0	Tri-County Airport	GA	301,050	72,211	124,605	497,866
2J9	Quincy Municipal Airport	GA	223,200	66,770	n/a	289,970
2R4	Peter Prince Field	GA	277,500	255,250	511,630	1,044,380
54J	DeFuniak Springs Municipal Airport	GA	248,940	232,405	147,640	628,985
AAF	Apalachicola Regional Airport		2,304,750	902,394	923,000	4,130,144
CEW	Bob Sikes Airport	GA	1,200,000	644,239	634,890	2,479,129
DTS	Destin-Fort Walton Beach Airport	GA	499,904	372,180	606,685	1,478,769
MAI	Marianna Municipal Airport	GA	970,000	561,278	1,547,444	3,078,722
PNS	Pensacola Gulf Coast Regional Airport	PR	2,078,400	2,308,200	2,191,375	6,577,975
TLH	Tallahassee Regional Airport		2,120,550	2,747,885	3,189,190	8,057,625
X13	Carrabelle-Thompson Airport		303,000	10,000	71,986	384,986
	District 3 C)verall =	10,527,294	8,172,812	9,948,445	28,648,551

Figure 2-1: District Pavement Area by Use



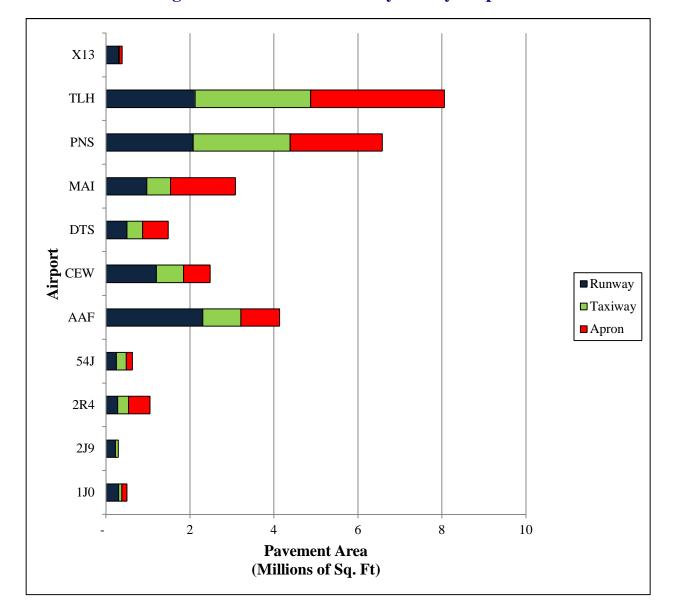


Figure 2-2: Pavement Area by Use by Airport

As part of this process, the individual airport network maps have been referenced in the State Plane Coordinate System. This update included the referencing of aerial imagery supplied by FDOT to the Network Definition Maps resulting in a GIS based navigation map for use on mobile GPS data collection units.

3. PAVEMENT EVALUATION

3.1 Pavement Condition Survey

The pavement condition survey was performed using the methods described in ASTM D 5340-04 and FAA Advisory Circular 150/5380-6B. These inspections were performed by a minimum of two inspection personnel that have undergone appropriate FDOT training, demonstrated adequate experience, and have been approved by AO-PM. The visual surveys were performed with significant coordination with airport personnel to ensure minimal impacts on airport operations while maintaining safety. When appropriate, pavement inspectors were escorted by authorized airport personnel.

The inspection of pavement facilities is limited to the identified sample units. The number of sample units inspected in each pavement section was determined to achieve a confidence level of representative distresses throughout the facility. The sampling rate used for the FDOT SAPMP is identified in **Table 3-1: Sampling Rate for FDOT Condition Surveys**.

Table 3-1: Sampling Rate for FDOT Condition Surveys

	AC Pavemen	ts		PCC Paveme	nts	
N	n	1	N	n		
11	Runway	Others	11	Runway	Others	
1-4	1	1	1-3	1	1	
5-10	2	1	4-6	2	1	
11-15	3	2	7-10	3	2	
16-30	5	3	11-15	4	2	
31-40	7	4	16-20	5	3	
41-50	8	5	21-30	7	3	
<u>≥</u> 51	20% but ≤20	10% but ≤10	31-40	8	4	
			41-50	10	5	
			<u>≥</u> 51	20% but <u><</u> 20	10% but ≤10	

Where

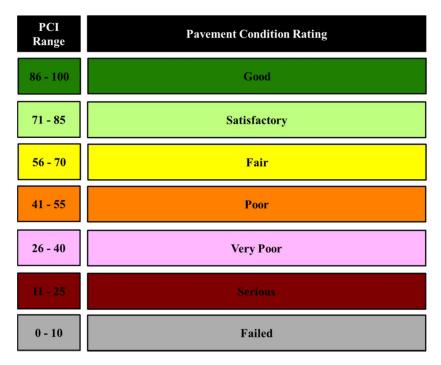
N = total number of sample units in Section

n = number of sample units to inspect

3.2 Pavement Condition Summary

The pavement condition results from each airport have been developed by analyzing the specific pavement distresses using U.S. Army Corp of Engineers CERL MicroPAVER 5.2.4 software. In adherence to the ASTM D 5340-04, the pavement condition index ranges from 100 to 0 with corresponding condition ratings of "Good" to "Failed", respectively. **Figure 3-1: PCI Rating Scale** depicts the standard index with the corresponding condition ratings and color identification used for this program update.

Figure 3-1: PCI Rating Scale



District 3's overall PCI is at a 70, which corresponds to a 'Fair' condition. **Table 3-2: Condition Summary by Airport** below represents the results of the PCI inspection at each airport within the District. Specific individual airport results are identified in each individual airport report.

Table 3-2: Condition Summary by Airport

FAA Identifier	Airport Name		Runway PCI	Taxiway PCI	Apron PCI	Overall PCI	Overall Condition Rating
1J0	Tri-County Airport	GA	70	93	75	74	Satisfactory
2J9	Quincy Municipal Airport	GA	62	61	n/a	62	Fair
2R4	Peter Prince Field	GA	76	78	76	76	Satisfactory
54J	DeFuniak Springs Municipal Airport	GA	96	87	91	92	Good
AAF	Apalachicola Regional Airport		69	58	50	62	Fair
CEW	Bob Sikes Airport	GA	94	76	53	79	Satisfactory
DTS	Destin-Fort Walton Beach Airport	GA	58	69	55	60	Fair
MAI	Marianna Municipal Airport	GA	55	31	21	33	Very Poor
PNS	Pensacola Gulf Coast Regional Airport	PR	86	86	65	79	Satisfactory
TLH	Tallahassee Regional Airport		71	71	81	75	Satisfactory
X13	Carrabelle-Thompson Airport		77	57	65	74	Satisfactory
	District 3 O	verall =	74	70	63	70	Fair

Pavement use has an influence on the pavement condition of each facility. For example, the amount and type of distresses observed on a primary runway can vary from a maintenance apron based on frequency and variety of traffic loads experienced. **Figure 3-2: PCI by Pavement Use by Airport** graphically shows the PCI for each pavement use at each airport within the District.

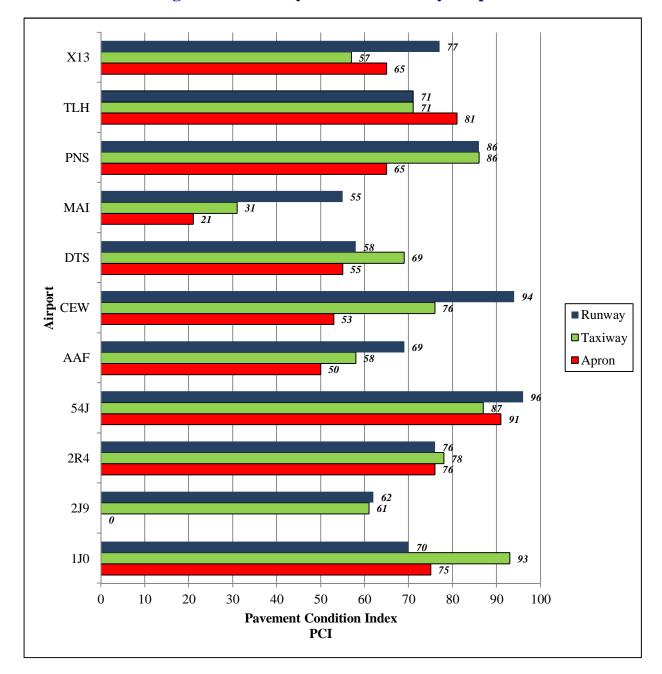


Figure 3-2: PCI by Pavement Use by Airport

A summary of the area-weighted PCI for each pavement use for all pavements throughout the District are shown below in **Figure 3-3: PCI by Pavement Use**.

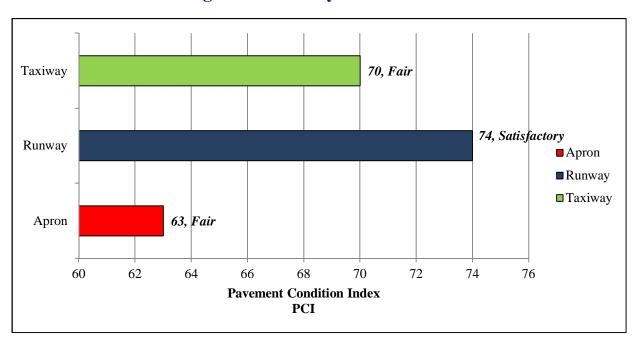


Figure 3-3: PCI by Pavement Use

Figure 3-4: PCI by Pavement Rank below illustrates the area-weighted PCI within the District for Primary, Secondary and Tertiary pavements. The pavement facility ranking was established during the 1998/1999 survey and has been updated based on airport feedback. Primary pavements are considered to be of highest importance, examples include a primary runway and its parallel taxiway. Secondary pavements examples include a secondary crosswind runway and its parallel taxiway. Tertiary pavements examples can be active aprons such as a maintenance area or a non-active aircraft equipment storage apron.

100 Pavement Condition Index 90 80, Satisfactory 80 70, Fair 69, Fair 70 60 **50** 40 **30** 20 10 0 Primary Secondary Tertiary **Pavement Section Rank**

Figure 3-4: PCI by Pavement Rank

Pavement facility surface types include four common types of pavement: Portland cement concrete (PCC), asphalt concrete overlaid on Portland cement concrete (APC), asphalt concrete (AC), and asphalt concrete overlay on asphalt concrete (AAC). **Figure 3-5: PCI by Surface Type** summarizes the PCI based on the various pavement types within the District. Whitetopping, a pavement type that consists of a thin concrete overlay on an asphalt concrete pavement does exist at several airports in the Florida Airport System. However, it does not exist at any airports in District 3.

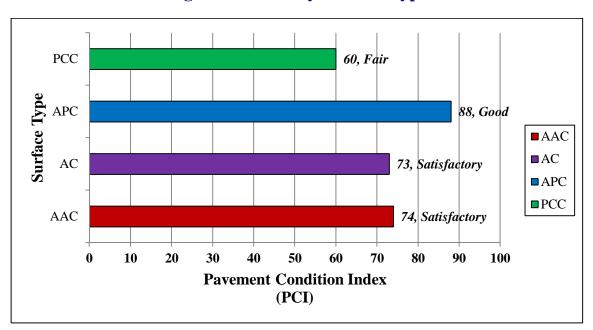


Figure 3-5: PCI by Surface Type

4. MICROPAVER ANALYSIS

4.1 Performance Modeling

A significant benefit of consolidating Florida's Airport System's pavement infrastructure within the FDOT SAPMP is the large amount of pavement condition data recorded using consistent methods of measurement. The historic pavement condition, or performance trend, has been compiled throughout the entire State system since the inception of the SAPMP and is used in the development of Performance Models. These models have been categorically arranged and developed to predict the future conditions of pavements based on Florida's specific characteristics of climate, construction materials, and operations. Each model has been developed based on the following criteria:

AIRPORT TYPE (Primary, Regional Reliever, or General Aviation)

- > FACILITY USE (Runway, Taxiway, or Apron)
- >>FACILITY SURFACE TYPE (AC, AAC, APC, or PCC)

The following figure, **Figure 4-1: Example Performance Model**, represents the condition data collected for all participating General Aviation airport runways constructed of AC pavement. The approximate deterioration observed for these pavement types, excluding outliers, is about 1.5 PCI points per year. Appropriate curves have been developed for the identified airport types, facility use, and pavement material.

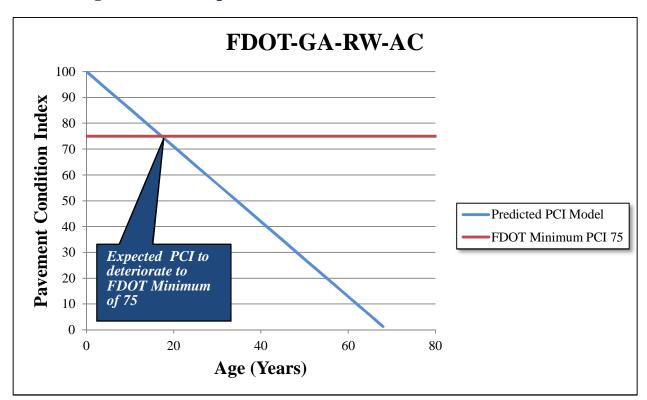


Figure 4-1: Example Performance Model: FDOT-GA-RW-AC

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The historic trends of pavement performance at Florida airport facilities for all performance models are consolidated within the program database. This information is utilized in the prediction of pavement performance based on the current PCI determined from the inspections that took place between 2011 and 2012. Major rehabilitation is planned based on the predicted PCI. The intent of this for both the individual airport and the District to be aware of anticipated rehabilitation work based on condition.

4.2 Maintenance Policies

FDOT utilizes the distress data collected to estimate maintenance work efforts for pavement area sections that would benefit from this work, specifically sections with a PCI ranging from 65 to 100. Examples of maintenance work include crack sealing, area patching, seal coat applications, and other routine maintenance efforts that typically can be performed in a short time frame by airport maintenance personnel. This maintenance, or repair-type activity, is intended to preserve and extend pavement condition above the critical condition.

Table 4-1: Routine Maintenance Activities for Airfields provides the list of the maintenance activities used in MicroPAVER to treat specific distress types based on the FDOT Distress Repair and Maintenance Manual. 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.

Table 4-1: Routine Maintenance Activities for Airfield Pavements

Surface	Distress	Severity*	Work Type	MicroPAVER Code	Work Unit
	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
nt	Depression	M, H	Patching - AC Deep	PA-AD	SqFt
Asphalt Concrete Pavement	Jet Blast	N/A	Patching - AC Deep	PA-AD	SqFt
ave	Joint Ref. Crack	M, H	Crack Sealing – AC	CS-AC	Ft
Pe	L & T Crack	M, H	Crack Sealing – AC	CS-AC	Ft
rete	Oil Spillage	N/A	Patching - AC Shallow	PA-AS	SqFt
onc	Patching	M, H	Patching - AC Deep	PA-AD	SqFt
ပိ	Polished Agg.	N/A	No Localized M&R	NONE	N/A
ıalt	Davidina /	L	Surface Sealing - Rejuvenating	SS-RE	SqFt
sph	Raveling /	M	Surface Seal - Coal Tar	SS-CT	SqFt
Ā	Weathering	Н	Microsurfacing	MI-AC	SqFt
	Rutting	M, H	Patching - AC Deep	PA-AD	SqFt
	Shoving	M, H	Grinding (Localized)	GR-LL	SqFt
	Slippage Crack	N/A	Patching - AC Shallow	PA-AS	SqFt
	Swelling	M, H	Patching - AC Deep	PA-AD	SqFt
	Blow-Up	L, M, H	Patching - PCC Full Depth	PA-PF	SqFt
	Corner Break	M, H	Patching - PCC Full Depth	PA-PF	SqFt
ien1	Linear Crack	M, H	Crack Sealing – PCC	CS-PC	Ft
em	Durobility Crook	Н	Slab Replacement – PCC	SL-PC	SqFt
Pav	Durability Crack	M	Patching - PCC Full Depth	PA-PF	SqFt
te]	Jt. Seal Damage	M, H	Joint Seal (Localized)	JS-LC	Ft
cre	Small Patch	M, H	Patching - PCC Partial Depth	PA-PP	SqFt
, Jon	Large Patch	M, H	Patching - PCC Full Depth	PA-PF	SqFt
ıt (Popouts	N/A	No Localized M&R	NONE	N/A
ner	Pumping	N/A	No Localized M&R	NONE	N/A
Cer	Scaling	Н	Slab Replacement – PCC	SL-PC	SqFt
Portland Cement Concrete Pavement	Faulting	M, H	Grinding (Localized)	GR-PP	Ft
tlar	Shattered Slab	M, H	Slab Replacement – PCC	SL-PC	SqFt
Por	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

4.3 Major Rehabilitation Planning

Major 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 Major M&R plan for the airports. 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. Appendix B identifies the Cost by Condition and Critical PCI used in the development of major rehabilitation. **Table 4-2:** M&R Activities by Condition summarizes the M&R activities based on PCI values, as established by the FDOT.

Table 4-2: M&R Activities by Condition

	Activity	PCI Trigger
Maintenance	Crack Sealing and Full-Depth Patching	90
Maintenance	Crack Searing and Fun-Depth Fatching	80
		70
	Mill and Overlay (AC) or	60
Rehabilitation	Concrete Pavement Restoration (PCC)	50
Renadilitation		40
	December ation	30
	Reconstruction	20

Special consideration is given to pavements that exhibit a significant amount of structural distresses while maintaining a PCI above the critical condition. The presence of structural distresses may be attributed to the greater fatigue load being applied to the pavement than the original design capacity. Therefore in certain situations, pavement area sections may be triggered for work due to structural distresses found rather than solely based on PCI values determined.

4.4 Budget Analysis Approach

The scope of this update was to identify the overall work required for major rehabilitation using comparative costs based on the condition survey and predicted pavement performance. As mentioned previously, the criteria for major rehabilitation is based on the MicroPAVER set critical PCI of 65. From the previous SAPMP updates, FDOT has developed desired minimum PCI values based on the airport type and facility use, which are shown in **Table 4-3: FDOT Minimum Service Levels.** The rehabilitation activity identified is based on the critical PCI of 65.

Table 4-3: FDOT Minimum Service Levels

Use	FDOT Minimum PCI						
	GA	RL	PR				
Runway	75	75	75				
Taxiway	65	65	70				
Apron	60	65	65				

The development of major rehabilitation work expressed in the individual airport reports was based on an 'unlimited budget' or unconstrained budget scenario. This scenario was selected in particular as a means to identify project activity based on the condition need. This information is intended to be used as a planning tool to determine project selection based on airport priority, facility use, and traffic demand, among other factors.

The major rehabilitation costs of the projects identified are determined using a cost scale range based on the PCI of the pavement area sections. The cost study performed for pavement work such as mill and overlay and reconstruction identified varying costs based on airport type. The schedule of costs used for the major rehabilitation is referenced in Appendix B.

4.5 Immediate Major Rehabilitation Need

Based on the condition surveys performed in 2011 and 2012, major rehabilitation has been identified for pavement area sections that resulted in a current condition below 65. The following table, **Table 4-4: Summary of Immediate Major Rehabilitation Needs**, identifies the immediate major rehabilitation need for each airport under the unlimited funding scenario. The breakdown of these costs on an individual airport basis can be found in Appendix C.

Table 4-4: Summary of Immediate Major Rehabilitation Needs

FAA Identifier	Airport Name	Type	Current Average PCI	Current Condition Rating	Immediate Major Rehabilitation Need Costs
1J0	Tri-County Airport	GA	74	Satisfactory	\$122,010.56
2J9	Quincy Municipal Airport	GA	62	Fair	\$771,465.26
2R4	Peter Prince Field	GA	76	Satisfactory	\$459,966.76
54J	DeFuniak Springs Municipal Airport	GA	92	Good	\$0.00
AAF	Apalachicola Regional Airport	GA	62	Fair	\$13,006,872.07
CEW	Bob Sikes Airport	GA	79	Satisfactory	\$4,286,192.34
DTS	Destin-Fort Walton Beach Airport	GA	60	Fair	\$5,291,803.29
MAI	Marianna Municipal Airport	GA	33	Very Poor	\$30,493,570.54
PNS	Pensacola Gulf Coast Regional Airport	PR	79	Satisfactory	\$9,824,952.74
TLH	Tallahassee Regional Airport	PR	75	Satisfactory	\$14,897,729.14
X13	Carrabelle-Thompson Airport	GA	74	Satisfactory	\$98,352.53
	District 3	70	Fair	\$79,252,915.24	

4.6 10-Year Major Rehabilitation Program

Based on the condition surveys performed in 2011 and 2012 and the predicted pavement condition using the performance models, major rehabilitation has been identified for additional pavement area sections that are expected to reach a condition below 65 in the next 10 years. **Table 4-5: Summary of 10-Year Major Rehabilitation Costs by Airport** below identifies the

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major rehabilitation need for each airport over a program period of 10 years assuming an unlimited budget. It includes the immediate needs identified in **Table 4-4: Summary of Immediate Major Rehabilitation Needs**.

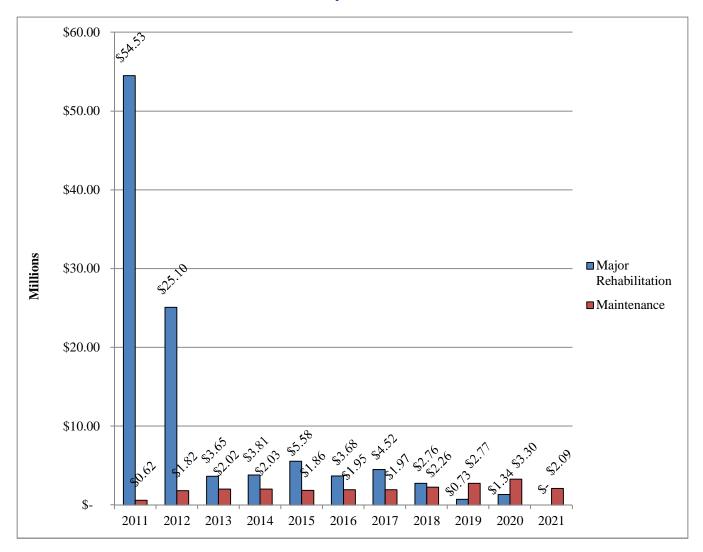
The breakdown of these costs on an individual airport basis can be found in Appendix C.

Table 4-5: Summary of 10-Year Major Rehabilitation Costs by Airport

FAA Identifier	Airport Name	Туре	Current Average PCI	Current Condition Rating	10-Year Major Rehabilitation Need Cost	
1J0	Tri-County Airport	GA	74	Satisfactory	\$981,937.38	
2J9	Quincy Municipal Airport	GA	62	Fair	\$899,319.98	
2R4	Peter Prince Field	GA	76	Satisfactory	\$2,249,150.85	
54J	DeFuniak Springs Municipal Airport	GA	92	Good	\$203,455.31	
AAF	Apalachicola Regional Airport	GA	62	Fair	\$18,018,430.42	
CEW	Bob Sikes Airport	GA	79	Satisfactory	\$5,031,844.14	
DTS	Destin-Fort Walton Beach Airport	GA	60	Fair	\$6,680,024.24	
MAI	Marianna Municipal Airport	GA	33	Very Poor	\$31,740,681.11	
PNS	Pensacola Gulf Coast Regional Airport	PR	79	Satisfactory	\$10,320,281.29	
TLH	Tallahassee Regional Airport	PR	75	Satisfactory	\$28,487,084.52	
X13	Carrabelle-Thompson Airport	GA	74	Satisfactory	\$1,080,996.86	
	District 3 (70	Fair	\$105,693,206.10		

Figure 4-2: Summary of 10-Year Major Rehabilitation and Maintenance Costs by Plan Year depicts the 10-year major rehabilitation and maintenance needs under an unlimited funding scenario for all airports in District 3 by plan year.

Figure 4-2: Summary of 10-Year Major Rehabilitation and Maintenance Costs by Plan Year



Tables 4-6 and **4-7** below list the major rehabilitation costs and maintenance needs costs, respectively, by airport for each plan year.

Table 4-6: 10-Year Major Rehabilitation Costs by Airport by Year

FAA Identifier	Туре	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
1 J 0	GA	\$122,010.56	\$0.00	\$0.00	\$0.00	\$809,189.54	\$50,737.28	\$0.00	\$0.00	\$0.00	\$0.00	n/a	\$981,937.38
2J9	GA	\$771,465.26	\$102,543.72	\$0.00	\$0.00	\$25,311.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	n/a	\$899,319.98
2R4	GA	\$459,996.76	\$0.00	\$0.00	\$0.00	\$27,342.39	\$30,145.50	\$881,238.09	\$527,563.68	\$33,176.73	\$289,687.70	n/a	\$2,249,150.85
54J	GA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$203,455.31	\$0.00	\$0.00	n/a	\$203,455.31
AAF	GA	\$13,006,872.07	\$103,607.77	\$189,498.08	\$0.00	\$3,068,588.54	\$1,565,439.62	\$51,475.63	\$0.00	\$32,948.71	\$0.00	n/a	\$18,018,430.42
CEW	GA	\$4,286,192.34	\$0.00	\$613,180.65	\$0.00	\$92,518.77	\$39,952.38	\$0.00	\$0.00	\$0.00	\$0.00	n/a	\$5,031,844.14
DTS	GA	\$5,291,803.29	\$0.00	\$386,316.36	\$115,008.37	\$120,991.52	\$263,836.45	\$225,271.39	\$223,153.77	\$53,643.09	\$0.00	n/a	\$6,680,024.24
MAI	GA	\$30,493,570.54	\$61,617.73	\$1,185,492.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	n/a	\$31,740,681.11
PNS	PR	n/a	\$9,824,952.74	\$113,300.80	\$159,386.91	\$0.00	\$0.00	\$0.00	\$36,621.81	\$0.00	\$186,019.03	\$0.00	\$10,320,281.29
TLH	PR	n/a	\$14,897,729.14	\$1,160,409.00	\$3,532,604.26	\$1,436,844.15	\$1,694,999.78	\$2,520,436.73	\$1,769,633.63	\$612,769.17	\$861,658.66	\$0.00	\$28,487,084.52
X13	GA	\$98,352.53	\$109,034.65	\$0.00	\$0.00	\$0.00	\$31,343.77	\$842,265.91	\$0.00	\$0.00	\$0.00	n/a	\$1,080,996.86
Annua	l Total =	\$54,530,263.35	\$25,099,485.75	\$3,648,197.73	\$3,806,999.54	\$5,580,785.91	\$3,676,454.78	\$4,520,687.75	\$2,760,428.20	\$732,537.70	\$1,337,365.39	\$0.00	\$105,693,206.10

Table 4-7: 10-Year Maintenance Costs by Airport by Year

FAA Identifier	Туре	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
1J0	GA	\$71,546.34	\$79,913.02	\$90,516.47	\$97,757.83	\$23,648.61	\$21,887.92	\$25,790.50	\$29,345.78	\$33,871.05	\$39,131.57	n/a	\$513,409.09
2Ј9	GA	\$19,255.77	\$2,481.09	\$3,969.80	\$5,612.77	\$4,652.83	\$6,235.28	\$12,018.40	\$18,486.59	\$26,993.65	\$35,394.89	n/a	\$135,101.07
2R4	GA	\$53,292.55	\$131,712.40	\$151,299.53	\$175,183.24	\$194,818.90	\$216,018.26	\$141,607.07	\$103,414.92	\$110,836.74	\$97,483.75	n/a	\$1,375,667.36
54J	GA	\$22,522.27	\$20,920.16	\$27,112.07	\$35,915.37	\$43,914.17	\$51,907.30	\$60,834.66	\$52,876.37	\$61,275.81	\$76,996.00	n/a	\$454,274.18
AAF	GA	\$163,458.71	\$317,538.86	\$363,104.77	\$412,466.23	\$171,569.66	\$102,940.05	\$159,905.71	\$254,558.19	\$350,843.79	\$464,094.84	n/a	\$2,760,480.81
CEW	GA	\$63,749.77	\$82,750.71	\$44,640.87	\$68,754.96	\$91,750.95	\$121,319.01	\$147,075.83	\$189,323.84	\$244,454.77	\$301,558.91	n/a	\$1,355,379.62
DTS	GA	\$59,128.74	\$106,308.07	\$80,744.68	\$79,703.56	\$77,395.18	\$60,499.55	\$49,656.70	\$39,014.24	\$60,337.92	\$82,316.43	n/a	\$695,105.07
MAI	GA	\$114,234.50	\$119,011.15	\$6,742.16	\$11,338.29	\$15,489.98	\$77,259.67	\$123,960.04	\$197,157.16	\$298,752.88	\$376,475.48	n/a	\$1,340,421.31
PNS	PR	n/a	\$153,364.91	\$362,099.41	\$410,549.10	\$504,621.24	\$576,323.91	\$697,102.96	\$836,055.73	\$950,203.47	\$1,111,886.58	\$1,238,350.81	\$6,840,558.12
TLH	PR	n/a	\$751,760.30	\$825,651.12	\$660,384.42	\$654,389.12	\$631,675.47	\$546,957.61	\$538,665.15	\$623,359.21	\$703,517.05	\$853,826.96	\$6,790,186.41
X13	GA	\$50,828.01	\$52,350.58	\$60,339.36	\$68,909.10	\$77,753.47	\$83,823.51	\$2,314.22	\$3,451.74	\$4,615.65	\$6,734.11	n/a	\$411,119.75
Annua	l Total =	\$618,016.66	\$1,818,111.25	\$2,016,220.24	\$2,026,574.87	\$1,860,004.11	\$1,949,889.93	\$1,967,223.70	\$2,262,349.71	\$2,765,544.94	\$3,295,589.61	\$2,092,177.77	\$22,671,702.79

5. CONCLUSION

The FDOT Aviation Office has updated the Statewide Airfield Pavement Management Program through the pavement condition surveys performed at each participating airport and preparation of M&R planning information in compliance with the FAA Advisory Circular 150/5380-6B. MicroPAVER software was utilized to determine pavement conditions in accordance with ASTM D 5340-04 and develop maintenance and rehabilitation policies consistent with the FDOT Aviation Office policies. These policies were used to identify pavement rehabilitation projects based on the condition of the pavement over a 10-year period that are detailed in the individual airport reports and in Appendix C.

This study was focused on identifying current pavement condition and using a condition based tool to assist in the evaluation of pavement performance and identify and prioritize maintenance and rehabilitation needs and costs to maximize useful pavement life. The methods used to determine pavement condition for this program update, as with previous updates, have been performed in accordance with ASTM D 5340-04. The process is intended to provide airport sponsors with guidance in planning pavement maintenance and rehabilitation projects and funding agencies with planning tools for allocation of funds.

A detailed breakdown of pavement condition for each airport is included in Appendix C. As can be seen in this report and by comparing pavement conditions on an airport by airport basis, there is a wide variation in pavement conditions between airports. Recommended major rehabilitation recommendations for each airport are also included in Appendix C. High priority runway projects, based on pavement conditions below the FDOT recommended minimum service level PCI of 75, which the District should consider as immediate needs are listed below. These are not all the needs at each airport in the District and may not be the individual airport's priority, but should be considered in development of funding programs.

1J0 - Tri-County Airport

→ Runway 12-30, pavement mill and overlay \$0.80M

2J9 - Quincy Municipal Airport

→ Runway 14-32, pavement mill and overlay \$0.66M

DTS – Destin-Fort Walton Beach Airport

→ Runway 14-32, pavement mill and overlay \$1.98M

MAI – Marianna Municipal Airport

- → Runway 18-36, pavement mill and overlay \$1.19M
- → Runway 8-26, pavement mill and overlay \$3.08M

TLH – Tallahassee Regional Airport

→ Runway 9-27, pavement mill and overlay \$8.93M

APPENDIX A

GLOSSARY OF TERMS

Glossary

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

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

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

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

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

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

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

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

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

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

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

Glossary (Continued)

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

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

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

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

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.

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

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

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

Glossary (Continued)

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

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

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

<u>Statewide Airfield Pavement Management Program (SAPMP)</u> – The Statewide Airfield Pavement Management Program is a program implemented in 1992 by the Florida Department of Transportation to plan, schedule, and design the maintenance and rehabilitation activities necessary for the airfield pavement on Florida's public airports to allow the airports to operate efficiently, economically, and without excessive down time.

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

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

APPENDIX B

M&R COST SCHEDULES AND CRITICAL PCIs

General Aviation Airports

M&R Activities and Unit Costs by Condition

	Activity	PCI Trigger	Cost/SqFt
Maintenance	Crook Scaling and Full Donth Patching	90	\$0.06
Maintenance	Crack Sealing and Full-Depth Patching	80	\$0.24
		70	\$3.00
	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	60	\$3.42
D 1 1 11 4		50	\$6.29
Rehabilitation		40	\$6.29
	D	30	\$13.62
	Reconstruction	20	\$13.62

Critical PCIs

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65

FDOT Minimum Service Level PCIs

Minimum PCI				
Runway	Taxiway	Apron		
75	65	60		

Regional Reliever Airports

M&R Activities and Unit Costs by Condition

	Activity	PCI Trigger	Cost/SqFt
Maintenance	Crack Sealing and Full-Depth Patching	90	\$0.10
Maintenance	Crack Searing and Fun-Deput Fatching	80	\$0.40
		70	\$0.90
	Mill and Overlay (AC) or	60	\$3.68
D 1 1 11 4	Concrete Pavement Restoration (PCC)	50	\$7.61
Rehabilitation		40	\$18.57
	D	30	\$18.57
	Reconstruction	20	\$18.57

Critical PCIs

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65

FDOT Minimum Service Level PCIs

Minimum PCI					
Runway Taxiway Apron					
75	65	65			

Primary Airports

M&R Activities and Unit Costs by Condition

	Activity	PCI Trigger	Cost/SqFt
Maintenance	Creak Scaling and Full Donth Patching	90	\$0.20
Maintenance	Crack Sealing and Full-Depth Patching	80	\$0.80
		70	\$1.40
	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	60	\$4.23
D 1 1 1 1 4		50	\$8.55
Rehabilitation		40	\$8.55
	D	30	\$20.88
	Reconstruction	20	\$20.88

Critical PCIs

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65

FDOT Minimum Service Level PCIs

Minimum PCI					
Runway Taxiway Apron					
75	70	65			

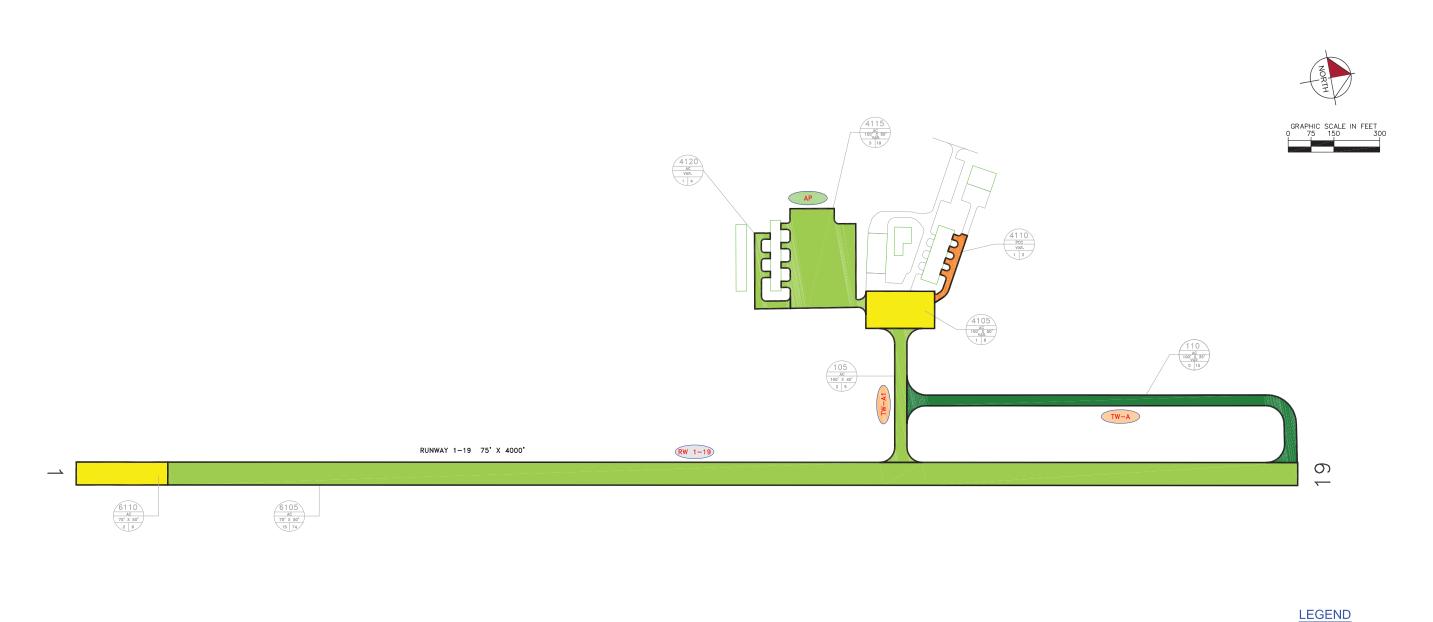
Maintenance Unit Costs

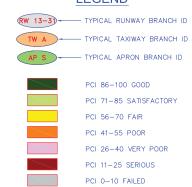
Maintenance Unit Costs for FDOT

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

APPENDIX C

AIRPORT CONDITION MAPS AND MAJOR REHABILITATION PROJECT TABLES





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

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NUMBER	DATE		REVISIONS				





2011 CONDITION MAP TRI-COUNTY AIRPORT HOLMES COUNTY, FLORIDA

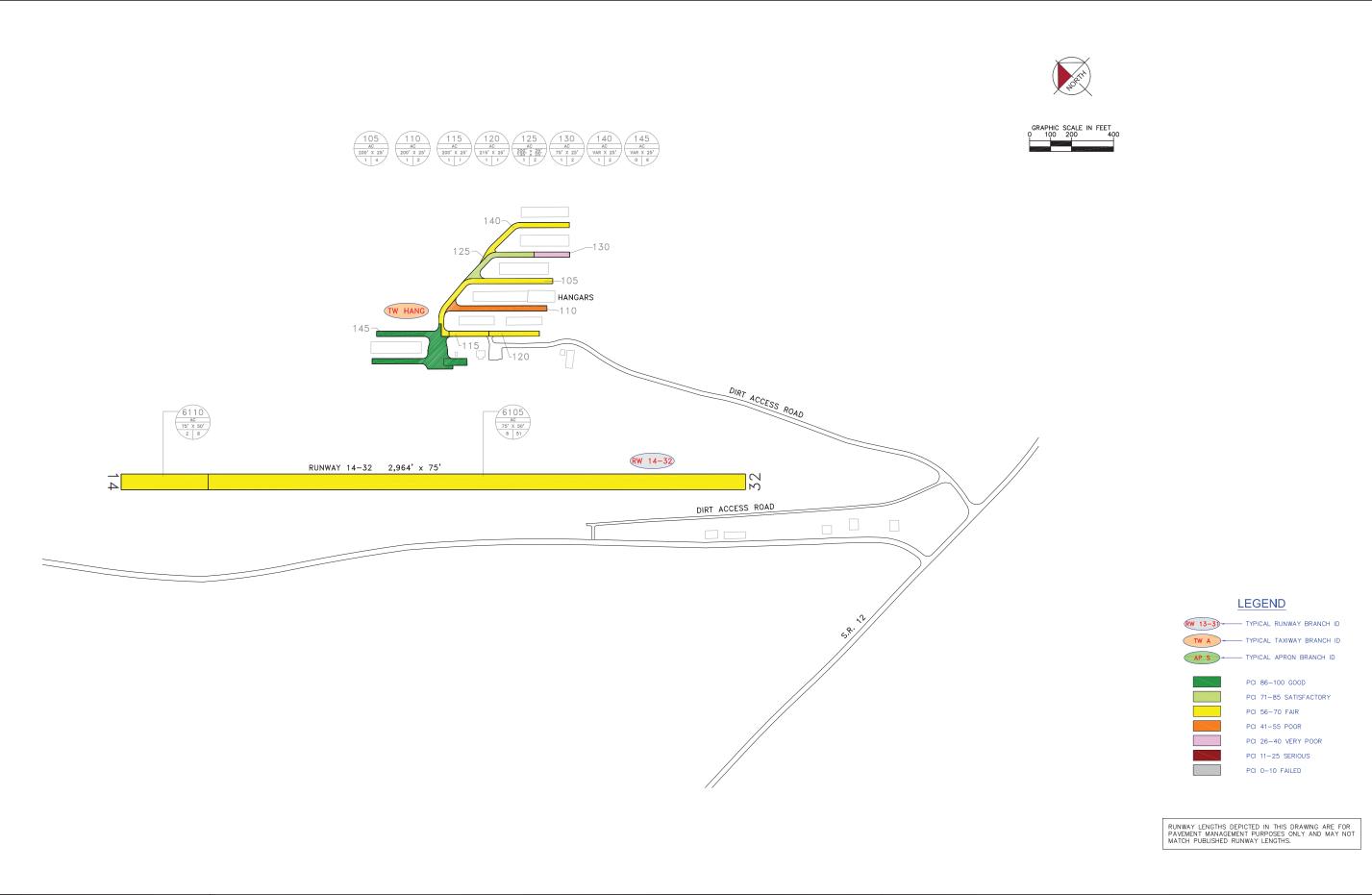
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

1JO
FDOT DISTRICT

Tri-County Airport (1J0)

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
2011	Apron	4110	PCC	7,540	\$47,426.60	49	PCC Restoration	100
2011	Runway 1-19	6110	AC	23,700	\$74,583.95	61	Mill and Overlay	100
2015	Apron	4105	AC	28,175	\$82,480.91	63	Mill and Overlay	100
2015	Runway 1-19	6105	AC	277,350	\$726,708.63	64	Mill and Overlay	100
2016	Taxiway Alpha 1	105	AC	18,800	\$50,737.28	64	Mill and Overlay	100
	Total				\$981,937.37	55		100

^{*} Costs are adjusted for inflation.







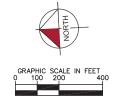


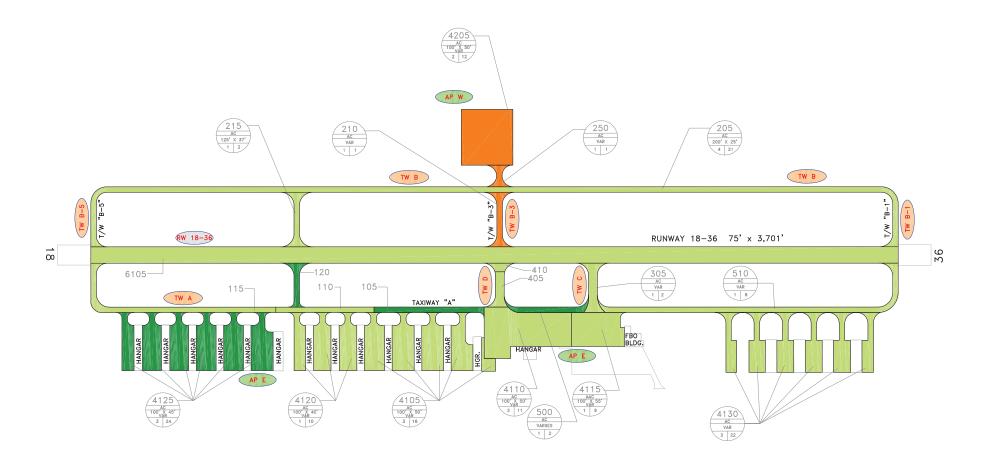
2J9

Quincy Municipal Airport (2J9)

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
2011	Runway 14-32	6105	AAC	192,150	\$552,239.47	62	Mill and Overlay	100
2011	Runway 14-32	6110	AC	31,050	\$106,191.07	60	Mill and Overlay	100
2011	Taxiway to Hangars	110	AC	12,730	\$80,071.71	44	Mill and Overlay	100
2011	Taxiway to Hangars	130	AC	4,250	\$32,963.01	38	Reconstruction	100
2012	Taxiway to Hangars	105	AC	17,720	\$47,472.44	63	Mill and Overlay	100
2012	Taxiway to Hangars	115	AC	4,750	\$12,725.40	63	Mill and Overlay	100
2012	Taxiway to Hangars	120	AC	6,000	\$14,387.05	64	Mill and Overlay	100
2012	Taxiway to Hangars	140	AC	11,660	\$27,958.83	64	Mill and Overlay	100
2015	Taxiway to Hangars	125	AC	9,660	\$25,311.00	64	Mill and Overlay	100
-		-	-	Total	\$899,319.98	58		100

^{*} Costs are adjusted for inflation.







LEGEND

TYPICAL RUNWAY BRANCH ID

TW A

TYPICAL TAXIWAY BRANCH ID

AP S

TYPICAL APRON BRANCH ID

PCI 86–100 GOOD

PCI 71–85 SATISFACTORY

PCI 56–70 FAIR

PCI 41–55 POOR

PCI 26–40 VERY POOR

PCI 11–25 SERIOUS

PCI 0–10 FAILED

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

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2011 CONDITION MAP

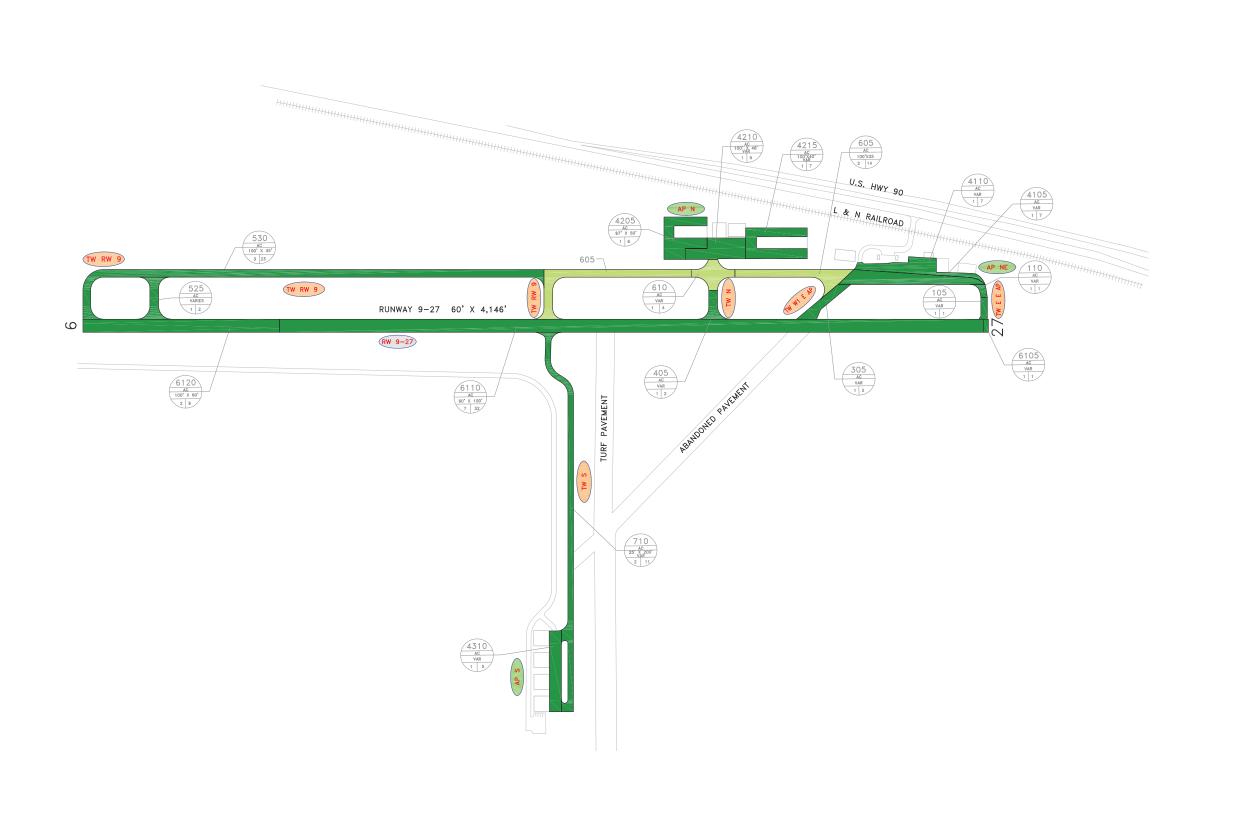
PETER PRINCE FIELD AIRPORT MILTON, SANTA ROSA, FLORIDA

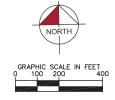
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

Peter Prince Field (2R4)

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
2011	Apron West	4205	AC	60,360	\$379,664.43	46	Mill and Overlay	100
2011	Taxiway Bravo	210	AC	8,970	\$51,272.53	52	Mill and Overlay	100
2011	Taxiway Bravo	250	AC	4,620	\$29,059.80	47	Mill and Overlay	100
2015	Taxiway Bravo	215	AC	9,340	\$27,342.39	63	Mill and Overlay	100
2016	East Connector Taxiway	305	AC	11,170	\$30,145.50	64	Mill and Overlay	100
2017	Apron East	4115	AAC	36,670	\$101,933.63	64	Mill and Overlay	100
2017	Runway 18-36	6105	AAC	277,500	\$771,382.15	64	Mill and Overlay	100
2017	Center Connector Taxiway	410	AAC	2,850	\$7,922.30	64	Mill and Overlay	100
2018	Apron East	4110	AAC	71,870	\$205,774.46	64	Mill and Overlay	100
2018	Taxiway Bravo	205	AC	104,950	\$300,487.40	64	Mill and Overlay	100
2018	Center Connector Taxiway	405	AAC	7,440	\$21,301.82	64	Mill and Overlay	100
2019	Taxiway Alpha to T-Hangars	110	AC	11,250	\$33,176.73	64	Mill and Overlay	100
2019	Apron East	4130	AC	85,360	\$289,687.70	63	Mill and Overlay	100
		_	-	Total	\$2,249,150.84	60		100

^{*} Costs are adjusted for inflation.





LEGEND

TYPICAL RUNWAY BRANCH ID

TW A

TYPICAL TAXIWAY BRANCH ID

AP S

TYPICAL APRON BRANCH ID

PCI 86–100 GOOD

PCI 71–85 SATISFACTORY

PCI 56–70 FAIR

PCI 41–55 POOR

PCI 26–40 VERY POOR

PCI 11–25 SERIOUS

PCI 0–10 FAILED

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

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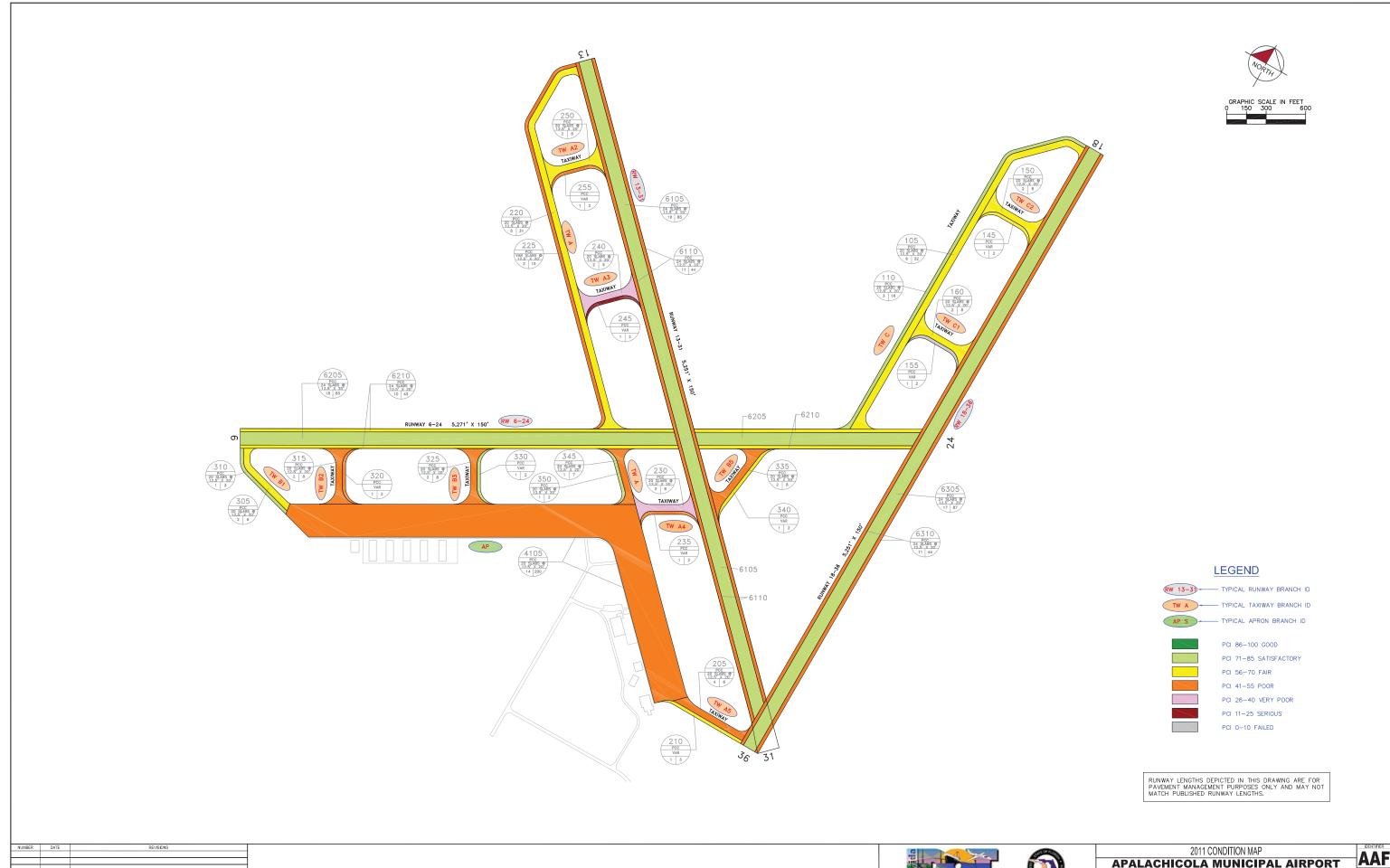


2011 CONDITION MAP
DEFUNIAK SPRINGS AIRPORT WALTON COUNTY, FLORIDA
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

DeFuniak Springs Municipal Airport (54J)

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
2018	North Taxiway	605	AC	56,720	\$162,397.76	64	Mill and Overlay	100
2018	North Taxiway	610	AC	14,340	\$41,057.54	64	Mill and Overlay	100
				Total	\$203,455.30	64		100

^{*} Costs are adjusted for inflation.







APALACHICOLA MUNICIPAL AIRPORT FRANKLIN COUNTY, FLORIDA FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

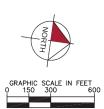
Apalachicola Regional Airport (AAF)

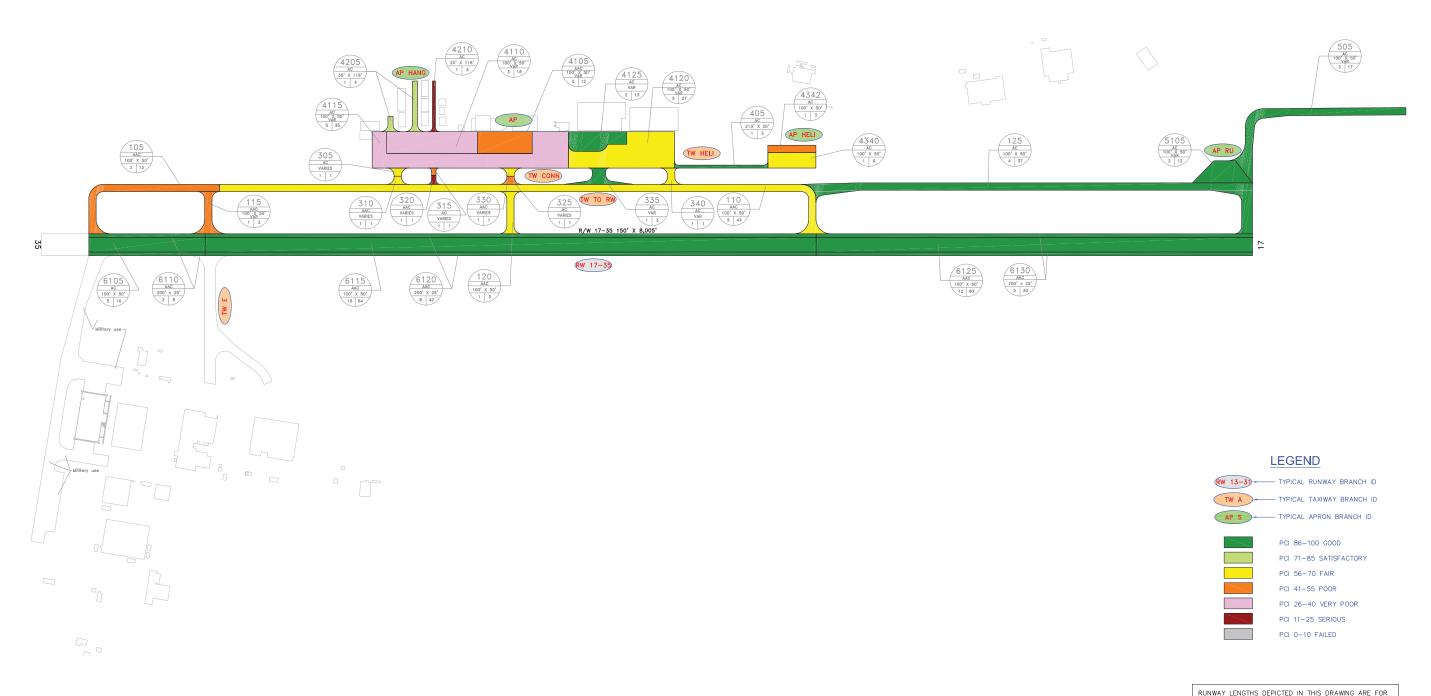
Year	Branch Name	Section ID	Surface Type	Section Area (ft ²)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2011	Apron	4105	PCC	923,000	\$5,805,670.46	49	Concrete Pavement Restoration	100
2011	Runway 13-31	6110	PCC	260,000	\$1,560,780.16	51	Concrete Pavement Restoration	100
2011	Runway 18-36	6310	PCC	261,000	\$1,566,783.16	51	Concrete Pavement Restoration	100
2011	Runway 6-24	6210	PCC	246,750	\$574,434.36	64	Concrete Pavement Restoration	100
2011	Taxiway A	220	PCC	169,696	\$395,052.54	64	Concrete Pavement Restoration	100
2011	Taxiway A	225	PCC	33,392	\$190,868.70	52	Concrete Pavement Restoration	100
2011	Taxiway A2	250	PCC	35,000	\$169,925.05	55	Concrete Pavement Restoration	100
2011	Taxiway A2	255	PCC	6,250	\$39,312.50	45	Concrete Pavement Restoration	100
2011	Taxiway A3	240	PCC	35,000	\$399,735.13	33	Reconstruction	100
2011	Taxiway A3	245	PCC	6,250	\$85,125.03	12	Reconstruction	100
2011	Taxiway A4	230	PCC	34,400	\$392,882.53	33	Reconstruction	100
2011	Taxiway A4	235	PCC	5,875	\$36,953.75	46	Concrete Pavement Restoration	100
2011	Taxiway A5	205	PCC	31,000	\$194,990.02	47	Concrete Pavement Restoration	100
2011	Taxiway A5	210	PCC	17,000	\$44,217.03	63	Concrete Pavement Restoration	100
2011	Taxiway B2	315	PCC	35,000	\$220,150.02	48	Concrete Pavement Restoration	100
2011	Taxiway B2	320	PCC	10,000	\$57,160.01	52	Concrete Pavement Restoration	100
2011	Taxiway B3	325	PCC	25,000	\$157,250.03	40	Concrete Pavement Restoration	100
2011	Taxiway B4	345	PCC	29,981	\$171,371.42	52	Concrete Pavement Restoration	100
2011	Taxiway B5	335	PCC	32,000	\$201,280.02	50	Concrete Pavement Restoration	100
2011	Taxiway B5	340	PCC	15,000	\$72,825.02	55	Concrete Pavement Restoration	100
2011	Taxiway C	105	PCC	152,250	\$479,131.09	61	Concrete Pavement Restoration	100

Apalachicola Regional Airport (AAF)

Year	Branch Name	Section ID	Surface Type	Section Area (ft ²)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2011	Taxiway C1	155	PCC	10,500	\$143,010.05	9	Reconstruction	100
2011	Taxiway C2	145	PCC	10,500	\$47,964.02	56	Concrete Pavement Restoration	100
2012	Taxiway C1	160	PCC	35,000	\$103,607.77	62	Concrete Pavement Restoration	100
2013	Taxiway B1	305	PCC	30,000	\$82,782.08	63	Concrete Pavement Restoration	100
2013	Taxiway C2	150	PCC	35,000	\$106,716.00	62	Concrete Pavement Restoration	100
2015	Runway 13-31	6105	PCC	520,000	\$1,682,051.53	62	Concrete Pavement Restoration	100
2015	Runway 18-36	6305	PCC	522,000	\$1,367,737.17	64	Concrete Pavement Restoration	100
2015	Taxiway B4	350	PCC	7,175	\$18,799.84	64	Concrete Pavement Restoration	100
2016	Runway 6-24	6205	PCC	495,000	\$1,335,901.91	64	Concrete Pavement Restoration	100
2016	Taxiway C	110	PCC	76,125	\$229,537.71	63	Concrete Pavement Restoration	100
2017	Taxiway B1	310	PCC	15,000	\$51,475.63	62	Concrete Pavement Restoration	100
2019	Taxiway B3	330	PCC	10,000	\$32,948.71	63	Concrete Pavement Restoration	100
				Total	\$18,018,430.45	52		100

^{*} Costs are adjusted for inflation.





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

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2011 CONDITION MAP

BOB SIKES AIRPORT
OKALOOSA COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

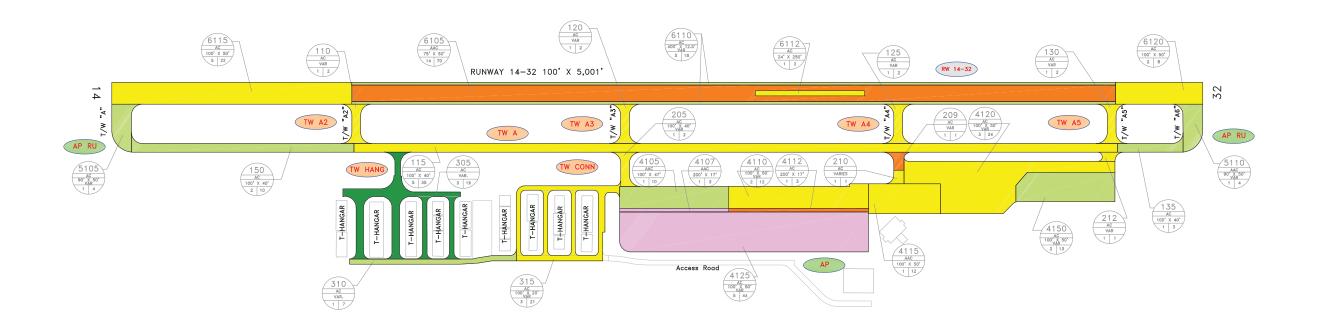
Bob Sikes Airport (CEW)

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
2011	Apron	4105	AAC	56,250	\$353,812.53	44	Mill and Overlay	100
2011	Apron	4110	AC	93,820	\$865,208.27	36	Reconstruction	100
2011	Apron	4115	AC	187,430	\$1,865,866.11	35	Reconstruction	100
2011	Apron	4120	AC	136,040	\$316,701.32	64	Mill and Overlay	100
2011	Hangar Apron	4210	AC	7,350	\$100,107.03	12	Reconstruction	100
2011	Helicopter Apron	4342	PCC	16,500	\$103,785.01	45	Mill and Overlay	100
2011	Connector Taxiways to Apron	305	AC	3,873	\$12,188.34	61	Mill and Overlay	100
2011	Connector Taxiways to Apron	310	AAC	3,873	\$12,188.34	61	Mill and Overlay	100
2011	Connector Taxiways to Apron	315	AC	1,700	\$10,693.00	40	Mill and Overlay	100
2011	Connector Taxiways to Apron	320	AAC	2,200	\$29,964.01	19	Reconstruction	100
2011	Connector Taxiways to Apron	325	AC	3,870	\$24,342.30	48	Mill and Overlay	100
2011	Connector Taxiways to Apron	330	AAC	3,873	\$12,188.34	61	Mill and Overlay	100
2011	Connector Taxiways to Apron	340	AC	7,345	\$21,109.54	62	Mill and Overlay	100
2011	Taxiway to RW 17-35	105	AAC	59,950	\$377,085.53	49	Mill and Overlay	100
2011	Taxiway to RW 17-35	115	AAC	19,865	\$119,249.61	51	Mill and Overlay	100
2011	Taxiway to RW 17-35	120	AAC	16,645	\$61,703.05	59	Mill and Overlay	100
2013	Taxiway to RW 17-35	110	AAC	222,215	\$613,180.65	63	Mill and Overlay	100
2015	Helicopter Apron	4340	AC	35,310	\$92,518.77	64	Mill and Overlay	100
2016	Hangar Apron	4205	AC	13,250	\$39,952.38	63	Mill and Overlay	100
				Total	\$5,031,844.13	49		100

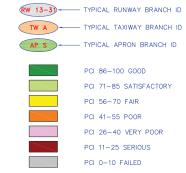
^{*} Costs are adjusted for inflation.







LEGEND



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

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2011 CONDITION MAP DESTIN - FT. WALTON BEACH AIRPORT OKALOOSA COUNTY, FLORIDA

DTS

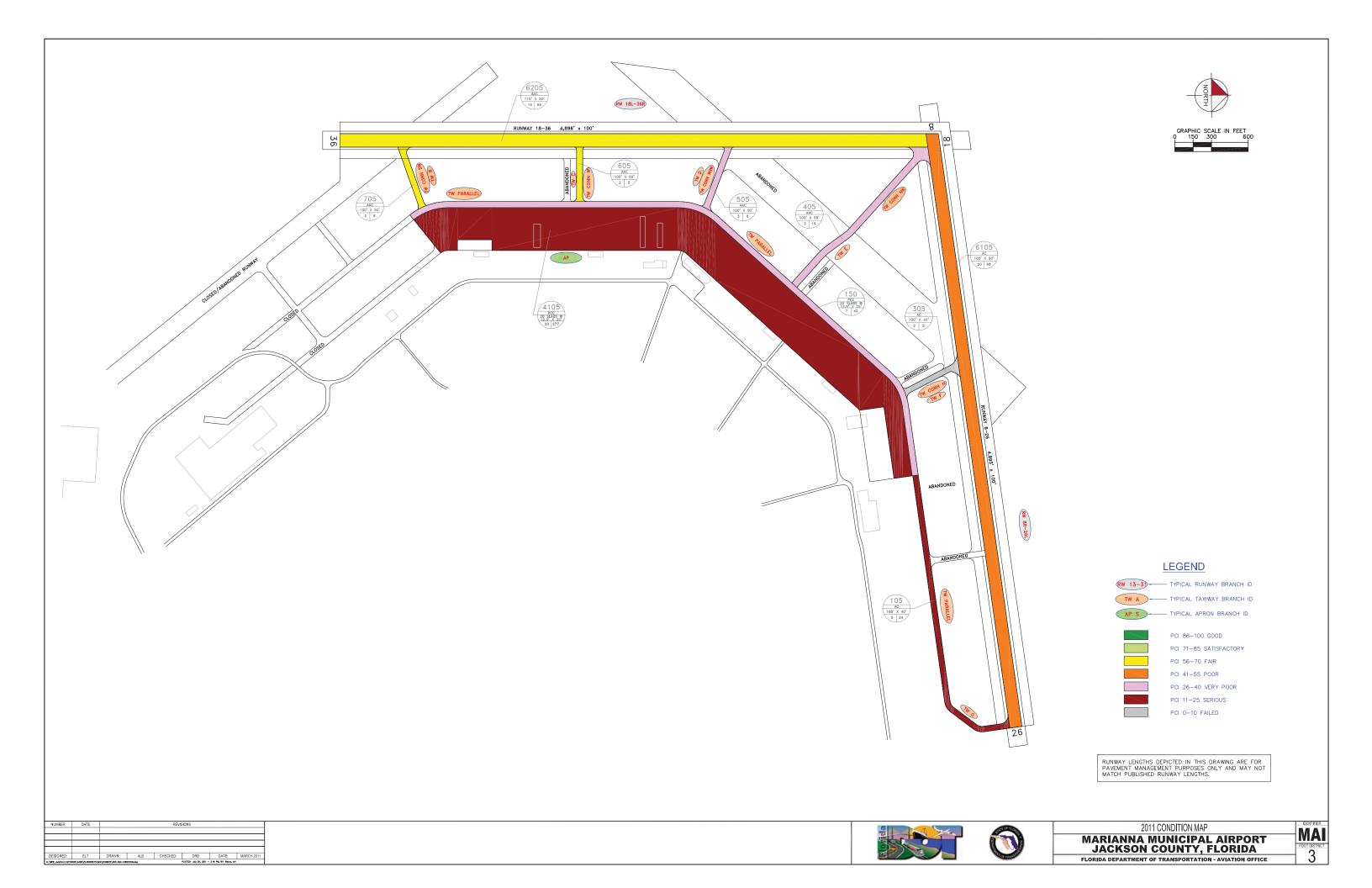
Destin-Fort Walton Beach Airport (DTS)

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
2011	Apron	4107	AAC	8,500	\$84,617.52	35	Reconstruction	100
2011	Apron	4110	AC	65,030	\$222,402.75	60	Mill and Overlay	100
2011	Apron	4112	AC	10,880	\$68,435.21	42	Mill and Overlay	100
2011	Apron	4120	AC	122,850	\$386,609.22	61	Mill and Overlay	100
2011	Apron	4125	AC	208,085	\$2,224,013.13	34	Reconstruction	100
2011	Runway 14-32	6105	AAC	250,404	\$1,359,443.62	53	Mill and Overlay	100
2011	Runway 14-32	6112	AC	12,000	\$44,484.03	59	Mill and Overlay	100
2011	Runway 14-32	6115	AC	110,000	\$407,770.25	59	Mill and Overlay	100
2011	Runway 14-32	6120	AC	40,000	\$171,240.08	57	Mill and Overlay	100
2011	Taxiway Alpha 2	110	AAC	9,350	\$24,319.37	63	Mill and Overlay	100
2011	Taxiway Alpha 3	120	AAC	9,350	\$37,343.92	58	Mill and Overlay	100
2011	Taxiway Alpha 4	125	AAC	9,350	\$37,343.92	58	Mill and Overlay	100
2011	Taxiway Alpha 5	130	AAC	9,340	\$21,743.53	64	Mill and Overlay	100
2011	Connector Taxiway to Apron	205	AAC	7,890	\$22,675.88	62	Mill and Overlay	100
2011	Connector Taxiway to Apron	209	AAC	4,600	\$28,934.00	45	Mill and Overlay	100
2011	Connector Taxiway to Apron	210	AAC	3,280	\$8,531.29	63	Mill and Overlay	100
2011	Connector Taxiway to Apron	212	AAC	2,970	\$9,346.60	61	Mill and Overlay	100
2011	Taxiway to Hangars	315	AC	46,120	\$132,548.97	62	Mill and Overlay	100
2013	Taxiway Alpha	115	AAC	140,000	\$386,316.36	63	Mill and Overlay	100
2014	Apron	4115	AAC	45,210	\$115,008.37	64	Mill and Overlay	100
2015	Taxiway Alpha	150	AAC	41,330	\$120,991.52	63	Mill and Overlay	100

Destin-Fort Walton Beach Airport (DTS)

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
2016	Runway 14-32	6110	AC	87,500	\$263,836.45	63	Mill and Overlay	100
2017	Apron	4105	AAC	50,000	\$138,987.77	64	Mill and Overlay	100
2017	Taxiway Alpha	135	AAC	12,640	\$35,136.11	64	Mill and Overlay	100
2017	Taxiway to Hangars	310	AC	18,400	\$51,147.50	64	Mill and Overlay	100
2018	Apron	4150	AC	59,700	\$170,929.95	64	Mill and Overlay	100
2018	Run-up Aprons	5110	AAC	18,240	\$52,223.82	64	Mill and Overlay	100
2019	Run-up Aprons	5105	AAC	18,190	\$53,643.09	64	Mill and Overlay	100
		Total	\$6,680,024.23	58		100		

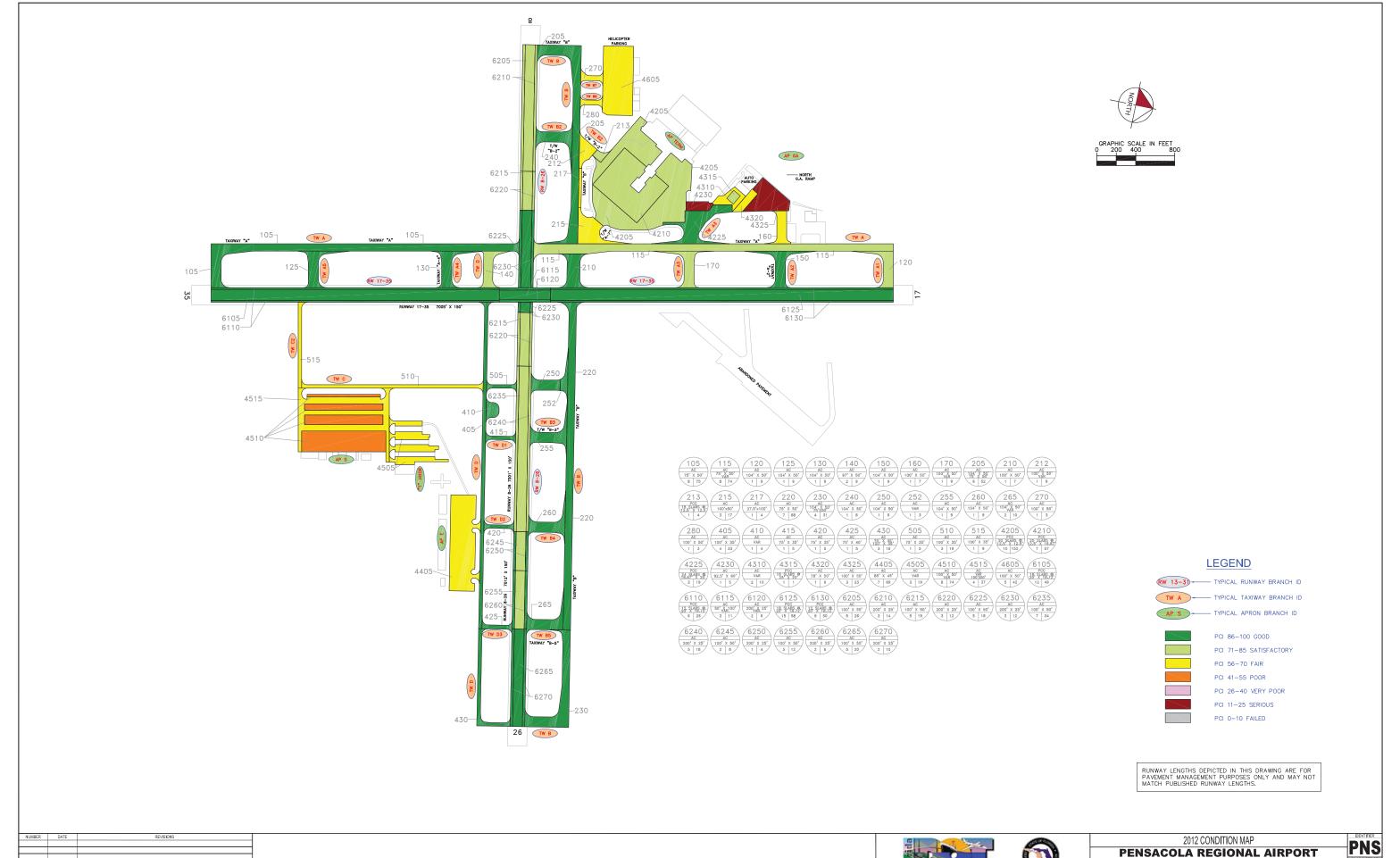
^{*} Costs are adjusted for inflation.



Marianna Municipal Airport (MAI)

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
2011	Apron	4105	PCC	1,547,444	\$21,076,194.12	19	Reconstruction	100
2011	Runway 8R-26L	6105	AC	490,000	\$3,082,100.24	41	Mill and Overlay	100
2011	Taxiway Bravo	705	AAC	27,500	\$94,050.07	60	Mill and Overlay	100
2011	Taxiway Delta	505	AAC	27,500	\$213,290.05	38	Reconstruction	100
2011	Taxiway Echo	405	AAC	94,528	\$733,159.34	38	Reconstruction	100
2011	Taxiway Foxtrot	305	AC	20,000	\$272,400.09	9	Reconstruction	100
2011	Taxiway Golf	105	AC	100,000	\$1,362,000.44	14	Reconstruction	100
2011	Taxiway Parallel	150	PCC	268,750	\$3,660,376.19	28	Reconstruction	100
2012	Taxiway Charlie	605	AAC	23,000	\$61,617.73	63	Mill and Overlay	100
2013	Runway 18L-36R	6205	AAC	480,000	\$1,185,492.84	64	Mill and Overlay	100
				Total	\$31,740,681.11	37		100

^{*} Costs are adjusted for inflation.

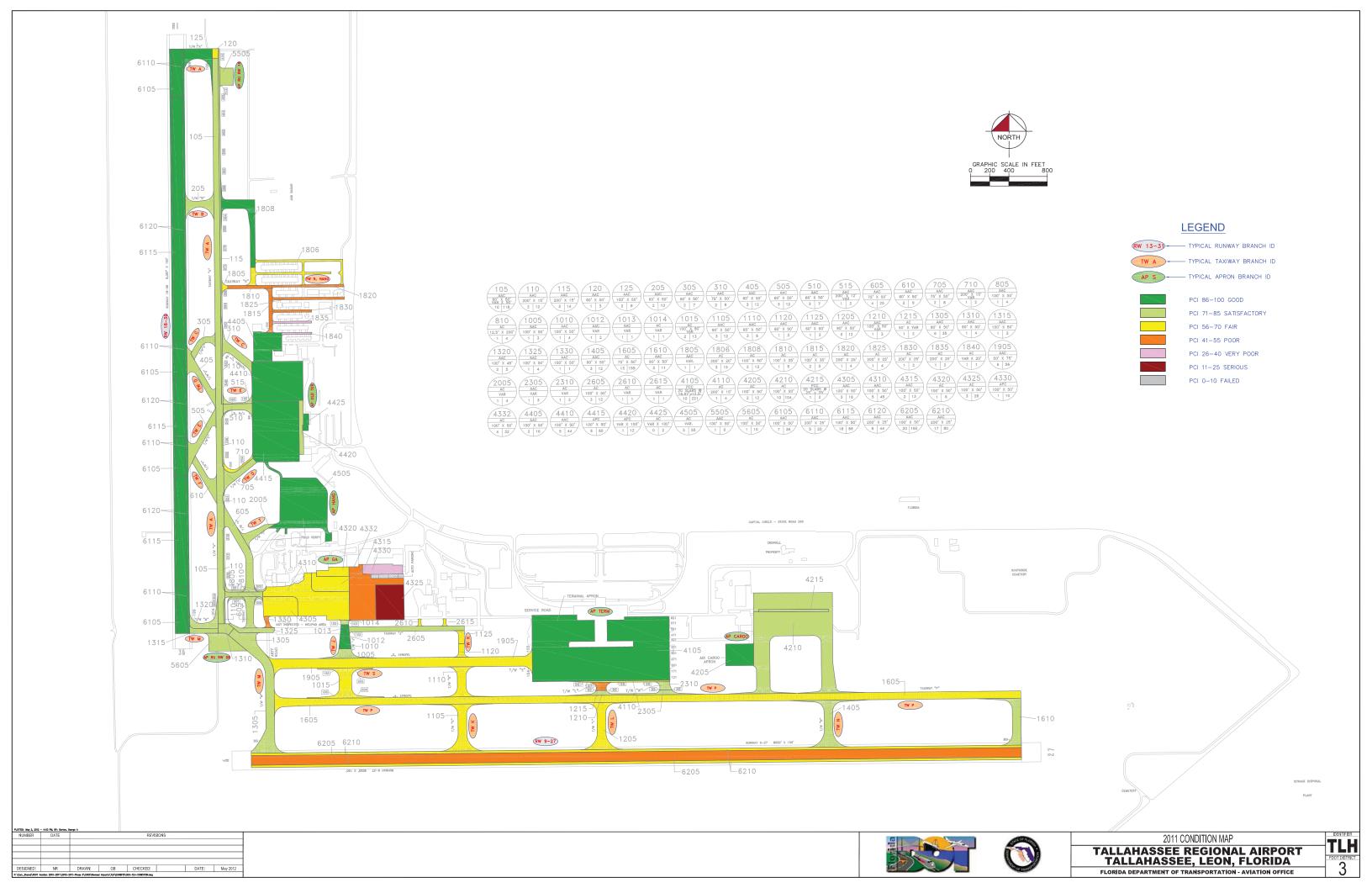


ESCAMBIA COUNTY, FLORIDA
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

Pensacola Gulf Coast Regional Airport (PNS)

Year	Branch Name	Section ID	Surface Type	Section Area (ft ²)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2012	West Apron	4605	AC	219,370	\$1,022,702.17	59	Mill and Overlay	100
2012	South Apron	4515	AC	219,095	\$1,021,420.12	59	Mill and Overlay	100
2012	South Apron	4510	AC	338,265	\$2,453,773.33	53	Mill and Overlay	100
2012	South Apron	4505	AC	112,540	\$476,043.81	60	Mill and Overlay	100
2012	East Apron	4405	AC	255,240	\$1,410,455.34	57	Mill and Overlay	100
2012	GA Apron	4325	AC	94,585	\$1,974,934.34	22	Reconstruction	100
2012	GA Apron	4320	AAC	21,585	\$128,603.35	56	Mill and Overlay	100
2012	GA Apron	4310	AC	28,960	\$89,718.04	64	Mill and Overlay	100
2012	Terminal Apron	4230	AC	23,760	\$496,108.68	21	Reconstruction	100
2012	Taxiway C2	515	AC	31,645	\$115,947.19	62	Mill and Overlay	100
2012	Taxiway Charlie	510	AC	67,180	\$246,147.34	62	Mill and Overlay	100
2012	Taxiway B8	280	AC	13,320	\$48,804.44	62	Mill and Overlay	100
2012	Taxiway B7	270	AC	14,900	\$75,900.55	58	Mill and Overlay	100
2012	Taxiway A7	215	AC	72,160	\$264,394.04	62	Mill and Overlay	100
2013	Taxiway B2	212	AC	32,535	\$113,300.80	63	Mill and Overlay	100
2014	Taxiway Bravo	217	AC	11,000	\$36,153.34	64	Mill and Overlay	100
2014	Taxiway A2	160	AC	37,495	\$123,233.57	64	Mill and Overlay	100
2018	GA Apron	4315	PCC	9,900	\$36,621.81	64	PCC Restoration	100
2020	Taxiway A1	120	AC	47,400	\$186,019.03	64	Mill and Overlay	100
				Total	\$10,320,281.29	57		100

^{*} Costs are adjusted for inflation.



<u>Tallahassee Regional Airport (TLH)</u>

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	GA Apron	4305	AAC	70,000	\$356,579.75	58	Mill and Overlay	100
2012	GA Apron	4325	AC	111,500	\$2,328,119.45	22	Reconstruction	100
2012	GA Apron	4330	APC	42,000	\$618,029.84	35	Reconstruction	100
2012	GA Apron	4332	AC	135,500	\$1,158,524.60	42	Mill and Overlay	100
2012	Runway 9-27	6205	AAC	805,000	\$6,882,747.65	48	Mill and Overlay	100
2012	Runway 9-27	6210	AAC	402,500	\$2,050,333.58	58	Mill and Overlay	100
2012	Taxiway Kilo	1110	AAC	38,360	\$151,406.79	61	Mill and Overlay	100
2012	Taxiway Kilo	1120	AAC	9,650	\$57,494.67	56	Mill and Overlay	100
2012	Taxiway Lima	1215	AC	7,950	\$54,234.88	54	Mill and Overlay	100
2012	Taxiway Mike	1330	AAC	5,823	\$49,786.63	46	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1805	AAC	1,850	\$6,254.85	63	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1806	AC	54,885	\$185,566.08	63	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1810	AC	17,000	\$145,349.95	49	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1815	AC	16,850	\$144,067.45	49	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1820	AC	18,750	\$160,312.45	47	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1825	AC	18,750	\$160,312.45	49	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1830	AC	10,000	\$85,499.96	40	Mill and Overlay	100
2012	Taxiway Romeo and to Hangars TWS	1835	AC	8,000	\$167,039.96	30	Reconstruction	100
2012	Taxiway Romeo and to Hangars TWS	1840	AC	8,140	\$129,816.68	34	Reconstruction	100
2012	Taxiway Zulu	2610	AC	1,849	\$6,251.47	63	Mill and Overlay	100
2013	GA Apron	4310	AAC	205,000	\$713,897.76	63	Mill and Overlay	100

<u>Tallahassee Regional Airport (TLH)</u>

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
2013	GA Apron	4315	AAC	63,000	\$201,029.14	64	Mill and Overlay	100
2013	Terminal Apron	4110	AC	14,000	\$44,673.14	64	Mill and Overlay	100
2013	Taxiway Juliet	1015	AC	62,931	\$200,808.96	64	Mill and Overlay	100
2014	GA Apron	4320	AC	40,000	\$131,466.67	64	Mill and Overlay	100
2014	Taxiway Golf	710	AAC	15,000	\$49,300.00	64	Mill and Overlay	100
2014	Taxiway Kilo	1105	AAC	54,000	\$193,692.65	63	Mill and Overlay	100
2014	Taxiway Lima	1205	AAC	55,000	\$180,766.68	64	Mill and Overlay	100
2014	Taxiway Papa and Cargo TW	1605	AC	590,000	\$2,116,271.55	63	Mill and Overlay	100
2014	Taxiway Sierra	1905	AAC	262,000	\$861,106.71	64	Mill and Overlay	100
2015	Taxiway Alpha	105	AAC	361,500	\$1,223,773.96	64	Mill and Overlay	100
2015	Taxiway Alpha	115	AAC	41,550	\$140,657.84	64	Mill and Overlay	100
2015	Taxiway Alpha	120	AAC	6,500	\$24,014.30	63	Mill and Overlay	100
2015	Taxiway Kilo	1125	AAC	9,350	\$34,543.65	63	Mill and Overlay	100
2015	Taxiway Zulu	2615	AC	3,750	\$13,854.40	63	Mill and Overlay	100
2016	Runway 18-36	6105	AAC	180,000	\$684,961.78	63	Mill and Overlay	100
2016	Taxiway Alpha	110	AAC	37,500	\$142,700.37	63	Mill and Overlay	100
2016	Taxiway Charlie	310	AAC	33,000	\$115,065.22	64	Mill and Overlay	100
2016	Taxiway Echo	515	AAC	7,500	\$28,540.07	63	Mill and Overlay	100
2016	Taxiway Hotel	805	AAC	20,000	\$69,736.50	64	Mill and Overlay	100
2016	Taxiway Mike	1305	AAC	165,812	\$578,157.40	64	Mill and Overlay	100
2016	Taxiway Mike	1325	AAC	21,750	\$75,838.44	64	Mill and Overlay	100

<u>Tallahassee Regional Airport (TLH)</u>

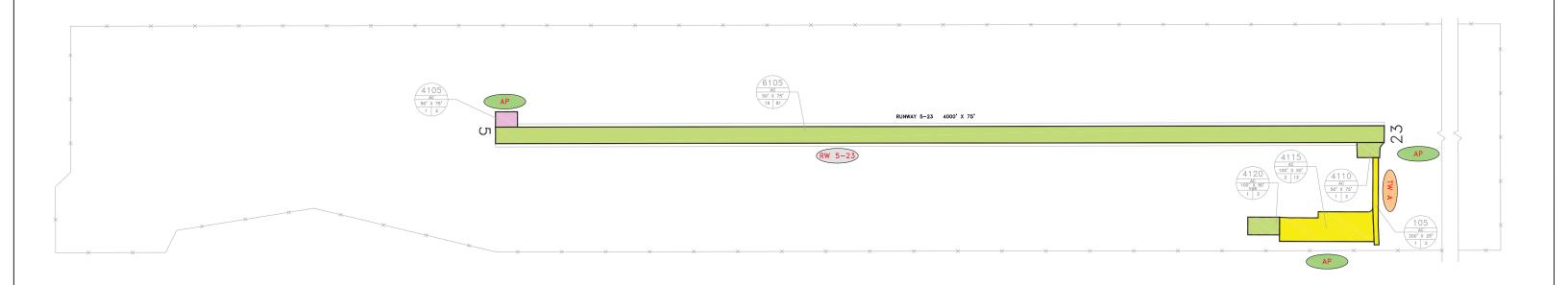
Year	Branch Name	Section ID	Surface Type	Section Area (ft²)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2017	Runway 18-36	6115	AAC	428,700	\$1,680,291.15	63	Mill and Overlay	100
2017	Runway 18-36	6120	AAC	214,350	\$840,145.58	63	Mill and Overlay	100
2018	Run-Up Apron at RW 18	5505	AAC	28,000	\$113,038.48	63	Mill and Overlay	100
2018	Runway 18-36	6110	AAC	90,000	\$363,337.97	63	Mill and Overlay	100
2018	Taxiway Bravo	205	AAC	32,330	\$130,519.07	63	Mill and Overlay	100
2018	Taxiway Delta	405	AAC	45,000	\$166,462.76	64	Mill and Overlay	100
2018	Taxiway Echo	505	AAC	45,000	\$166,462.76	64	Mill and Overlay	100
2018	Taxiway Foxtrot	605	AAC	95,000	\$383,523.42	63	Mill and Overlay	100
2018	Taxiway Lima	1210	AAC	13,000	\$52,482.15	63	Mill and Overlay	100
2018	Taxiway Mike	1320	AAC	26,098	\$105,359.94	63	Mill and Overlay	100
2018	Taxiway Papa and Cargo TW	1610	AAC	49,000	\$197,817.34	63	Mill and Overlay	100
2018	Taxiway Whisky	2305	AAC	14,500	\$53,638.00	64	Mill and Overlay	100
2018	Taxiway Whisky	2310	AC	10,000	\$36,991.72	64	Mill and Overlay	100
2019	Old Terminal Apron	4420	APC	24,986	\$103,896.82	63	Mill and Overlay	100
2019	Taxiway Echo	510	AAC	22,000	\$91,480.43	63	Mill and Overlay	100
2019	Taxiway Golf	705	AAC	32,200	\$133,894.08	63	Mill and Overlay	100
2019	Taxiway Mike	1310	AAC	14,178	\$58,954.98	63	Mill and Overlay	100
2019	Taxiway November	1405	AAC	54,000	\$224,542.87	63	Mill and Overlay	100
2020	Run-Up Apron at RW 36	5605	AC	54,000	\$211,920.41	64	Mill and Overlay	100
2020	Taxiway Charlie	305	AAC	20,000	\$78,489.04	64	Mill and Overlay	100
2020	Taxiway Foxtrot	610	AAC	34,000	\$145,620.21	63	Mill and Overlay	100

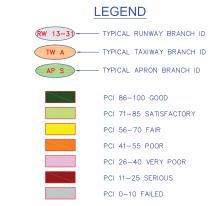
Tallahassee Regional Airport (TLH)

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 Hotel	810	AC	11,600	\$49,682.19	63	Mill and Overlay	100
2020	Taxiway Juliet	1005	AAC	20,509	\$80,486.59	64	Mill and Overlay	100
2020	Taxiway Mike	1315	AAC	15,287	\$59,993.10	64	Mill and Overlay	100
2020	Taxiway Zulu	2605	AC	60,000	\$235,467.12	64	Mill and Overlay	100
		\$28,487,084.51	59		100			

^{*} Costs are adjusted for inflation.







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

DAGE COMMANDE A		OH David (1) CHEO) Compt.		MOTOR Ann	BLOTTED: N	- 11 2011 - 2:50 DM B	E Burlon Course
DESIGNED:	FL	DRAWN:	BB	CHECKED:		DATE:	MAY 2011
NUMBER	DATE			REVIS	SIONS		





2011 CONDITION MAP

CARRABELLE-THOMPSON AIRPORT
FRANKLIN COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

Carrabelle-Thompson Airport (X13)

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
2011	Apron	4105	AAC	7,500	\$52,672.51	39	Reconstruction	100
2011	Taxiway Alpha	105	AC	10,000	\$45,680.02	56	Mill and Overlay	100
2012	Apron	4115	AC	45,472	\$109,034.65	64	Mill and Overlay	100
2016	Apron	4120	AC	11,614	\$31,343.77	64	Mill and Overlay	100
2017	Runway 5-23	6105	AAC	303,000	\$842,265.9`	64	Mill and Overlay	100
				\$1,080,996.86	57		100	

^{*} Costs are adjusted for inflation.