FULTON COUNTY-BROWN FIELD PAVEMENT MANAGEMENT REPORT

2007 GEORGIA AIRPORT PAVEMENT MANAGEMENT REPORT



Preserving Georgia's Critical Airport Pavement Infrastructure

Acknowledgement

This document was prepared under the auspices of

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The preparation of this document was financed in part through a planning grant from the Federal Aviation Administration, Department of Transportation, under the provisions of the Airport and Airway Improvement Act of 1982, as amended. This financial commitment is not to be construed that the FAA approves of all the recommendations and does not represent a binding financial obligation to provide federal funding. The contents of this publication reflect the views of the author(s), who is responsible for the facts and accuracy of the data presented herein. The opinions, findings and conclusions in this publication are those of the author(s) and not necessarily those of the Department of Transportation, State of Georgia or the Federal Aviation Administration.

FULTON COUNTY-BROWN FIELD

PAVEMENT MANAGEMENT REPORT



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JANUARY 2008

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INTRODUCTION

In 2007, the Georgia Department of Transportation (GDOT), Aviation Programs, selected Applied Pavement Technology, Inc. (APTech), assisted by Wilbur Smith Associates (WSA) and AVCON, to update its statewide Airport Pavement Management System (APMS). The ultimate goal of this project was to provide the airports and the State with the pavement information and analytical tools that can help them identify pavement related needs, optimize the selection of projects and treatments over a multi-year period, and evaluate the long-term impacts of their project priorities.

As part of this project, pavement conditions at Fulton County-Brown Field were assessed in 2007 using the Pavement Condition Index (PCI) procedure. During a PCI inspection, the types, severities, and amounts of distress present in a pavement are quantified. This information is then used to develop a composite index that represents the overall condition of the pavement in numerical terms, ranging from 0 (failed) to 100 (excellent). The PCI number is a measure of overall condition and is indicative of the level of work that will be required to maintain or repair a pavement. Further, the distress information provides insight into what is causing the pavement to deteriorate, which is the first step in selecting the appropriate repair action.

Programmed into an APMS, PCI information is used to determine when preventive maintenance actions, such as crack sealing, are advisable and also to identify the most cost-effective time to perform major rehabilitation, such as an overlay. The importance of identifying not only the type of repair but also the optimal time of repair is illustrated in Figure 1. This figure shows there is a point in a pavement's life cycle where the rate of deterioration increases. The financial impact of delaying repairs beyond this point can be severe.

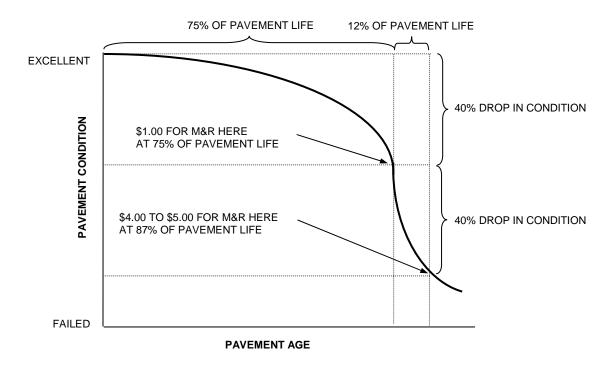


Figure 1. Pavement condition versus cost of repair.

This project included the collection of pavement history information, the development of CAD maps, the evaluation of current pavement condition, and the update of Aviation Program's APMS. The APMS was then used to prepare a 5-year pavement maintenance and rehabilitation program. Individual reports, such as this one, were prepared for each of the project airports to communicate the results of the pavement inspections. A statewide analysis report and an executive summary report were also developed.

PROJECT APPROACH

The project consisted of three major work elements: records review and network definition; pavement condition evaluation; and the development of a maintenance and rehabilitation plan for the preservation of the pavement infrastructure. The overall process is described in this chapter. The following chapter presents the results of the study.

Records Review and Network Definition

The first activities undertaken during the project involved gathering work history information pertaining to the airport pavements. The data collected include date of original construction and date of any subsequent rehabilitation; location of completed work; and the type of work undertaken. AVCON worked with GDOT Aviation Programs to gather this information.

The work history information was then used to divide the pavement system into management units – branches, sections, and sample units. A branch is a single entity that serves a distinct function. For example, a runway is considered a branch because it serves a single function (allowing aircraft to take off and land). Taxiways and aprons are also separate branches.

A branch is further divided into sections. Traditionally, sections are defined as parts of the branch that share common attributes, such as cross-section and last construction date. GDOT applies a modified approach to sectioning. The basic premise of this approach is that the section is considered the management unit of the APMS, and that it should represent a pavement area where it is realistic to expect that pavement maintenance or rehabilitation would be undertaken. For example, if a runway was built in 1968 and then extended and overlayed in 1984, this runway would be represented by a single section, even though there are two distinct construction periods. This is because in the future if repair work is scheduled for that runway it is probable that it will be programmed for the entire runway and not just a portion of it.

To estimate the overall condition of each pavement section, each section is subdivided into sample units. Portions of these sample units are then evaluated during pavement inspections and this information is extrapolated to predict the condition of the section as a whole.

Pavement Evaluation

APTech evaluated the pavements using the PCI procedure. This procedure is described in FAA AC 150/5380-6B and ASTM Standard D5340. The PCI provides a numerical indication of overall pavement condition, as illustrated in Figure 2. The types and amounts of deterioration are used to calculate the PCI value of the section. The PCI ranges from 0 to 100, with 100 representing a pavement in excellent condition. It should be noted that a PCI value is based on visual signs of pavement deterioration and does not provide a measure of structural capacity.

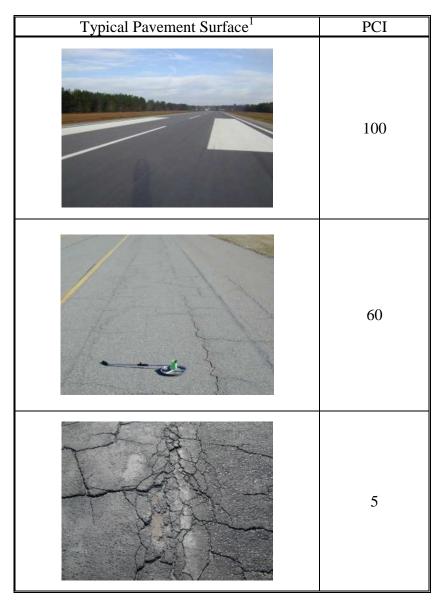


Figure 2. Visual representation of PCI scale.

In general terms, pavements with a PCI of 60 to 100 that are not exhibiting significant load-related distress will benefit from preventive maintenance actions, such as crack sealing and surface treatments. Pavements with a PCI of 40 to 60 may require major rehabilitation, such as an overlay. Often, when the PCI is less than 40, reconstruction is the only viable alternative due to the substantial damage to the pavement structure. Figure 3 illustrates how the appropriate repair type varies with the PCI of a pavement section.

¹Photographs shown are not specific to the Airport.

PAVEMENT CONDITION INDEX PCI Repair 86-100 71-85 Preventive Maintenance 56-70 41-55 Rehabilitation 26-40 11-25 Reconstruction

Figure 3. PCI versus repair type.

The types of distress identified during the PCI inspection provide insight into the cause of pavement deterioration. PCI distress types are characterized as load-related (such as alligator cracking on hot-mix asphalt [HMA] pavements or corner breaks on portland cement concrete [PCC] pavements), climate/durability-related (such as weathering [climate-related on HMA pavements] and D-cracking [durability-related on PCC pavements]), and other (distress types that cannot be attributed solely to load or climate/durability). Understanding the cause of distress helps in selecting a rehabilitation alternative that corrects the cause and thus eliminates its recurrence.

Appendix A contains tables for asphalt and concrete pavements indicating the typical types of distresses that may be identified during a PCI survey, the likely cause of each distress type, and feasible maintenance strategies for addressing each distress type.

Development of Maintenance and Rehabilitation Program

Using the information collected during the pavement inspection, a maintenance and rehabilitation program for 2008 through 2012 was developed. The Micro PAVER pavement management software was used to perform this analysis.

Analysis Parameters

Several analysis parameters were defined prior to running the analysis, including critical PCI values, budget, inflation rates, maintenance policies, and unit cost information.

Critical PCI Values

Micro PAVER uses critical PCI values to determine whether preventive maintenance or major rehabilitation is the appropriate repair action. Above the critical PCI, localized (such as crack sealing) and global (such as a slurry seal) preventive maintenance activities are recommended. Below the critical PCI, major rehabilitation (such as an overlay or reconstruction) is recommended. GDOT set the critical PCI values shown in Table 1.

Airport Classification	Runway	Taxiway	Apron
General Aviation	70	60	60
Commercial Service	75	65	65

Table 1. Critical PCI values.

Budget and Inflation Rate

An unlimited budget and an inflation rate of 7 percent were used during the analysis.

Maintenance Policies

Localized preventive maintenance policies and global preventive maintenance policies were developed for Aviation Programs. Localized maintenance policies, shown in Appendix D, identify the localized maintenance actions that Aviation Programs consider appropriate to correct different distress types when the PCI of the pavement is above the critical PCI level.

Global maintenance actions were also considered in the analysis. These are treatments that are applied over an entire section, rather than just to distressed areas. Rejuvenators were considered for pavements that are more than four years old with a PCI value greater than 80. Rejuvenators were only applied once during the analysis period to eligible sections.

Unit Costs

WSA developed unit costs, presented in Appendix D, for maintenance treatments and for major rehabilitation. For general aviation airports, the costs were separated by geographic regions. Micro PAVER estimates the cost of major rehabilitation based upon the PCI of the pavement. If major rehabilitation is recommended in the program, further engineering investigation will be needed to identify the most appropriate rehabilitation action and to more accurately estimate the cost of such work.

Analysis Approach

The goal of the maintenance and rehabilitation program is to maintain the pavements above established critical PCI values. Major rehabilitation was recommended for pavements in the year they dropped below their critical PCI value for 2008 through 2012.

For 2008, a localized preventive maintenance plan was developed for those pavement sections that were above their critical PCI value. If major rehabilitation was triggered for a section in 2009 or 2010, then localized maintenance was not recommended for 2008.

GENERAL RECOMMENDATIONS

Maintenance

In addition to the specific maintenance actions presented in Appendix E and Appendix F, the following strategies are recommended to prolong pavement life:

- 1. Conduct an aggressive campaign against weed growth through timely herbicide applications. Vegetation growing in pavement cracks is very destructive and significantly increases the rate of pavement deterioration.
- 2. Implement a periodic crack sealing program. Sealing cracks is a proven method for cost-effectively keeping water and debris out of the pavement system and extending its life.
- 3. Ensure that dirt does not build up along the edges of the pavements. This can create a "bathtub" effect—reducing the ability of water to drain away from the pavement system.
- 4. Closely monitor heavy equipment movement, such as construction equipment, emergency equipment, and fueling equipment, to make sure that it is only operating on pavement designed to accommodate the heavy loads this type of equipment often applies. Failure to restrict heavy equipment to appropriate areas may result in the premature failure of airport pavements.

Remaining in Compliance with Public Law 103-305

Public Law 103-305 states that after January 1, 1995, airport sponsors must provide assurances or certifications that an airport has implemented an effective airport pavement maintenance management system (PMMS) before the airport will be considered for funding of pavement replacement or reconstruction projects. To be in full compliance with the Federal law, the PMMS must include the following components at a minimum: pavement inventory, pavement inspections, record keeping, information retrieval, and program funding.

By undertaking this project, GDOT has provided Fulton County-Brown Field with an excellent basis for meeting the requirements of this law. The airport now has a complete pavement inventory and a detailed inspection. To remain in compliance with the law, the airport will also need to undertake monthly drive-by inspections of pavement conditions and track pavement-related maintenance activities. The next detailed inspection should occur in 2010.

Appendix G, which contains a copy of FAA AC 150/5380-6B, provides further information on Public Law 103-305. Specifically, Appendix 1 of this AC outlines what needs to be included in a PMMS to satisfy FAA Grant Assurance 11.

PROJECT RESULTS

Pavement Inventory

Fulton County-Brown Field has over 2,764,618 square feet of pavement, as shown in Figure 4. Figure 5 is a map of the airport showing the pavement system broken down into management units, as described on page 3 of this report.

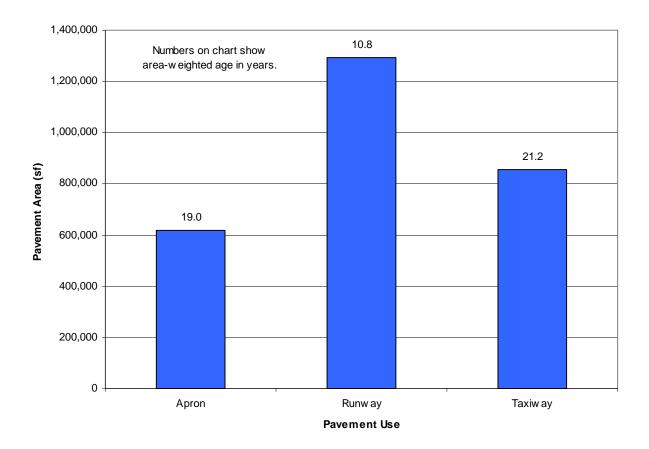


Figure 4. Pavement inventory.

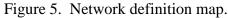


Figure 5. Network definition map. (11 x 17 except for very large airports that need larger map folded into a map sleeve)

Pavement Evaluation

The inspection of Fulton County-Brown Field was completed on July 9-10, 2007 using the PCI procedure described earlier on pages 3 through 5. The map presented earlier in Figure 4 identifies the sample units inspected during the pavement evaluation.

Inspection Comments

Following are the field comments made by the pavement inspectors.

The inspection at Fulton County-Brown Field was completed on July 9th and 10th, 2007. Ten sections were defined during the inspection.

Runway 8-26 is defined by one section, R826AB-10, that was recently rehabilitated and is in excellent condition with a PCI value of 100. No distresses were observed during inspection.

Runway 14-32 is defined by one section, R1432AB-10, that is in poor condition with a PCI value of 47. Moderate amounts of low and medium-severity block and longitudinal and transverse (L&T) cracking were found throughout the runway. In addition, isolated areas of alligator cracking, swelling, and bleeding were also recorded. Most of the cracks were sealed, but the sealant was mostly failed.

Runway 9-27 also consists of one section, R927AB-10, and is in poor condition with a PCI value of 57. The primary distresses identified on the runway were low and medium-severity, sealed and unsealed, L&T cracking. Most of the crack sealant was failed. Isolated quantities of high-severity L&T cracking were also recorded due to the width of cracking. In addition, isolated areas of swelling were observed.

Taxiway 9-27 is defined by two sections. T927AB-10 connects Runway 9-27 and Runway 8-26, and is in poor condition with a PCI value of 57. Moderate amounts of low and medium-severity L&T cracking were observed throughout. The majority of cracking was sealed and medium-severity cracks were noted due to failed crack sealant. In addition, isolated areas of alligator cracking were identified. Section T927AB-20 includes a taxiway and run-up apron area to the north of Runway 9-27. It is in good condition with a PCI value of 84. Small amounts of low-severity, unsealed L&T cracking were the only distresses observed.

One section, running full length parallel to the Runway 14-32 on its west side, defines Taxiway A. TAAB-10 is in poor condition with a PCI value of 36. Significant amounts of low- and medium-severity block and L&T cracking were observed. The majority of the cracking was unsealed. Moderate amounts of medium-severity alligator cracking and small amounts of bleeding were also identified.

Similar to Taxiway A, Taxiway B runs parallel to the Runway 14-32 on its east side and is also in poor condition with a PCI value of 39. Significant amounts of low and medium-severity block cracking, L&T cracking, and alligator cracking were identified on this taxiway. Isolated areas of bleeding, swelling, and raveling and weathering were also recorded in this section. The majority of the cracking was unsealed.

Taxiway G consists of one section connecting Taxiway B and Taxiway I. TGAB-10 is in serious condition with a PCI value of 23. Significant amounts of low-severity, unsealed, block cracking were observed throughout the pavement section. Isolated quantities of medium-severity block,

L&T, as well as alligator cracking were also recorded on this taxiway. Vegetation growth was observed in some of the cracks.

Taxiway I consists of one section and runs parallel to the Runway 8-26. TIAB-10 is in poor condition with a PCI value of 30. Significant amounts of low and medium-severity L&T, block, and alligator cracking were identified. In addition, isolated areas of raveling and weathering, rutting, and bleeding were observed. All cracks were unsealed. Medium-severity cracking was recorded due to the presence of secondary cracking and had vegetation growth.

One section was defines the apron area. A01AB-10 is in fair condition with a PCI value of 70. Low-severity block and L&T cracking were identified in this section. Small quantities of medium-severity L&T cracking were also observed in this section. In addition, isolated areas of alligator cracking, raveling and weathering, patching, swelling, and bleeding were also noted. All cracks were unsealed.

Overall Pavement Condition

The 2007 area-weighted condition of Fulton County-Brown Field is 65, with conditions ranging from 23 to 100 [on a scale of 0 (failed) to 100 (excellent)]. This compares to a 2001 PCI of 61.

Figures 6 and 7 provide graphs summarizing the overall condition of the pavements at Fulton County-Brown Field. Figure 8 is a map that displays the condition of the pavements evaluated. Table 2 summarizes the results of the pavement evaluation and compares the 2001 conditions to the 2007 conditions.

Appendix B presents photographs taken during the PCI inspection, and Appendix C contains a detailed inspection report. The detailed inspection report provides information on the quantity of the different types and severities of distresses observed during the visual survey.

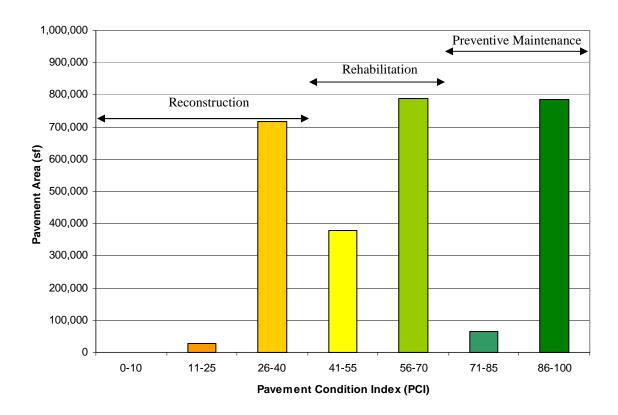


Figure 6. Condition distribution.

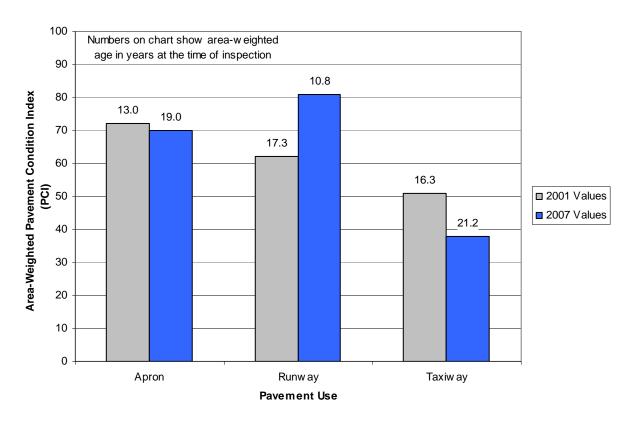


Figure 7. Condition by use.

Figure 8. PCI Map (11 x 17)

Table 2. Pavement evaluation results.

							% Dis	tress due to:	
Branch ¹	Section ¹	Surface Type ²	Section Area (sf)	LCD ³	2001 PCI	2007 PCI	Load ⁴	Climate or Durability ⁵	Distress Types Present ⁶
A01AB	10	AAC	616,265	6/1/1988	72	70	27	68	Alligator cracking, Bleeding, Block cracking, Depression, L&T Cracking, Patching, Swelling, Raveling & Weathering
R1432AB	10	AAC	333,605	6/1/1984	65	47	0	98	Bleeding, Block cracking, L&T Cracking, Swelling
R826AB	10	AAC	787,037	6/1/2003	57	100	0	0	No distress
R927AB	10	AAC	171,580	6/1/1989	75	57	0	98	L&T Cracking, Swelling
T927AB	10	AAC	44,864	6/1/1989	64	52	46	54	Alligator cracking, L&T Cracking
T927AB	20	AC	65,317	6/1/1999	N/A	84	0	100	L&T Cracking
TAAB	10	AAC	167,151	6/1/1984	61	36	35	65	Alligator cracking, Bleeding, Block cracking, L&T Cracking
TBAB	10	AAC	183,146	6/1/1984	48	39	33	66	Alligator cracking, Bleeding, Block cracking, L&T Cracking, Swelling, Raveling & Weathering
TGAB	10	AAC	27,568	6/1/1984	46	23	44	56	Alligator cracking, Block cracking, L&T Cracking
TIAB	10	AAC	368,085	6/1/1985	48	30	41	58	Alligator cracking, Bleeding, Block cracking, L&T Cracking, Rutting, Raveling & Weathering

NOTES:

¹See Figure 5 for the location of the branch.

²AC - asphalt cement concrete; AAC - asphalt overlay on AC; PCC - portland cement concrete; APC - asphalt overlay on PCC.

 $^{^{3}}LCD = \hat{l}ast construction date.$

⁴Distress due to load includes distresses attributed to a structural deficiency in the pavement, such as alligator (fatigue) cracking, rutting, or shattered concrete slabs. ⁵Distress due to climate or durability includes those distresses attributed to either the aging of the pavement and the effects of the environment (such as weathering and raveling or block cracking in asphalt pavements) or to a materials-related problem (such as durability cracking in a concrete pavement).

⁶L & T CR = longitudinal and transverse cracking.

Maintenance and Rehabilitation Program

A 5-year maintenance and rehabilitation program was developed for Fulton County-Brown Field as described on page 6 of this report.

A summary of the resultant program is presented in Table 3. Detailed information on the localized maintenance plan for 2008 is contained in Appendix E and Appendix F. While localized preventive maintenance should be an annual undertaking at Fulton County-Brown Field, it is not possible to accurately predict the propagation of cracking and so on. The airport should budget for maintenance every year and can use the 2008 maintenance plan as a baseline for that work. As the pavements age, it can be assumed that the amount of localized maintenance required will increase.

Because an unlimited budget was used in the analysis, it is probable that the pavement repair program will need to be adjusted to take into account economic and/or operational constraints. Further, the identification of the need for a major rehabilitation project does not mean that federal or state funding will be available to complete the work in the year shown. It is important to remember that regardless of the recommendations presented within this report, Fulton County-Brown Field is responsible for repairing pavements where existing conditions pose a hazard to safe operations.

Note that these recommendations are based upon a broad network level analysis and are meant to provide the Airport with an indication of the type of pavement-related work required during the next 5 years. Further engineering investigation will need to be performed to identify exactly which repair action is most appropriate and to more accurately estimate the cost of such work. In addition, the cost estimates provided were based on a statewide policy and each airport should adjust the maintenance policies and unit costs to match its own approach to pavement maintenance and to reflect local costs.

Table 3. 5-year program under an unlimited funding analysis scenario.

Branch ¹	Section	Year	Type of Repair ²	Estimated Cost³
A01AB	10	2008	Preventive Maintenance	\$17,710
R1432AB	10	2008	Major M&R	\$588,981
R826AB	10	2008	Rejuvenator	\$118,056
R927AB	10	2008	Major M&R	\$302,925
T927AB	10	2008	Major M&R	\$79,208
T927AB	20	2008	Rejuvenator	\$9,798
TAAB	10	2008	Major M&R	\$519,028
TBAB	10	2008	Major M&R	\$384,682
TGAB	10	2008	Major M&R	\$140,999
TIAB	10	2008	Major M&R	\$1,882,608
A01AB	10	2012	Preventive Maintenance	\$98,901
T927AB	20	2012	Preventive Maintenance	\$5,470

¹See Figure 5 for the location of the branch.

²Major Rehabilitation: overlay, mill and overlay, reconstruction, and so on;

Localized Maintenance: crack sealing, patching, joint resealing, and so on;

Global Maintenance: surface treatments, rejuvenators, and so on.

³Cost estimates based on broad statewide policy and should be adjusted to reflect local costs.

SUMMARY

This report documents the results of the pavement evaluation conducted at Fulton County-Brown Field. During a visual inspection of the pavements in 2007, it was found that the overall condition of the pavement network is a PCI of 65. A 5- year pavement repair program was generated for the Airport, which revealed that approximately \$4,148,365 needs to be expended on the pavement system in order to maintain and improve its condition.

APPENDIX A CAUSE OF DISTRESS TABLES

Table A-1. Cause of pavement distress, asphalt-surfaced pavements.

Distress Type	Probable Cause of Distress	Feasible Maintenance Strategies
Alligator Cracking	Fatigue failure of the asphalt concrete surface under repeated traffic loading	If localized, partial- or full-depth asphalt patch. If extensive, major rehabilitation needed.
Bleeding	Excessive amounts of asphalt cement or tars in the mix and/or low air void content	Spread heated sand, roll, and sweep. Another option is to plane excess asphalt. Or, remove and replace.
Block Cracking	Shrinkage of the asphalt concrete and daily temperature cycling; it is not load associated	At low severity levels, crack seal and/or surface treatment. At higher severities, consider overlay.
Corrugation	Traffic action combined with an unstable pavement layer	If localized, mill. If extensive, remove and replace.
Depression	Settlement of the foundation soil or can be "built up" during construction	Patch.
Jet Blast	Bituminous binder has been burned or carbonized	Patch.
Joint Reflection	Movement of the concrete slab beneath the asphalt concrete surface because of thermal and moisture changes	At low and medium severities, crack seal. At higher severities, especially if extensive, consider overlay.
Longitudinal and Transverse Cracking	Cracks may be caused by 1) poorly constructed paving lane joint, 2) shrinkage of the AC surface due to low temperatures or hardening of the asphalt, or 3) reflective crack caused by cracks in an underlying PCC ¹ slab	At low and medium severity levels, crack seal. At higher severities, especially if extensive, consider overlay options.
Oil Spillage	Deterioration or softening of the pavement surface caused by the spilling of oil, fuel, or other solvents	Patch.
Patching	N/A	Replace patch if deteriorated.
Polished Aggregate	Repeated traffic applications	Aggregate seal coat is one option. Could also groove or mill. Overlay is another option.
Raveling and Weathering	Asphalt binder may have hardened significantly	Patch if isolated. If low-severity, consider surface treatment if extensive. At medium and high severity levels, consider major rehabilitation if extensive.
Rutting	Usually caused by consolidation or lateral movement of the materials due to traffic loads	Patch medium and high severity levels if localized. If extensive, consider major rehabilitation.
Shoving	Where PCC pavements adjoin flexible pavements, PCC "growth" may shove the asphalt pavement	Mill and patch as needed.
Slippage Cracking	Low strength surface mix or poor bond between the surface and next layer of pavement structure	Partial- or full-depth patch.
Swelling	Usually caused by frost action or by swelling soil	Patch if localized. Major rehabilitation if extensive.

Table A-2. Cause of pavement distress, portland cement concrete pavements.

Distress Type	Probable Cause of Distress	Feasible Maintenance Strategies
Blow-Up	Incompressibles in joints	Partial- or full-depth patch. Slab replacement.
Corner Break	Load repetition combined with loss of support and curling stresses	Seal cracks at low severity. Full-depth patch.
Cracks	Combination of load repetition, curling stresses, and shrinkage stresses	Seal cracks. At high severity, may need full-depth patch or slab replacement.
Durability Cracking	Concrete's inability to withstand environmental factors such as freeze-thaw cycles	Full-depth patch if present on small amount of slab. At higher severity levels, once it has appeared on most of slab, slab replacement.
Joint Seal Damage	Stripping of joint sealant, extrusion of joint sealant, weed growth, hardening of the filler (oxidation, loss of bond to the slab edges, or absence of sealant in joint	Replace joint seal.
Patching (Small and Large)	N/A	Replace patches if deteriorated.
Popouts	Freeze-thaw action in combination with expansive aggregates	Monitor.
Pumping	Poor drainage, poor joint sealant	Seal cracks and joints. Underseal is an option if voids have developed. Establish good drainage.
Scaling	Overfinishing of concrete, deicing salts, improper construction, freeze-thaw cycles, poor aggregate, and alkali-silica reactivity	At low severity levels, do nothing. At medium and high severity levels, partial-depth patches or slab replacement.
Settlement	Upheaval or consolidation	At higher severity levels, leveling patch or grind to restore smooth ride.
Shattered Slab	Load repetition	Replace slab.
Shrinkage	Setting and curing of the concrete	Monitor.
Spalling (Joint and Corner)	Excessive stresses at the joint caused by infiltration of incompressible materials or traffic loads; weak concrete at joint combined with traffic loads	Partial-depth patch.

APPENDIX B

PHOTOGRAPHS



A01AB-10. Overview.



R1432AB-10. Overview.



R1432AB-10. Block cracking.



R826AB-10. Overview.



R927AB-10. Overview.



R927AB-10. L&T cracking.



T927AB-10. Overview.



T927AB-20. Overview.



TAAB-10. Overview.



TBAB-10. Overview.



TGAB-10. Overview.



TIAB-10. Overview.



TIAB-10. Alligator cracking.

APPENDIX C INSPECTION REPORT

Re-inspection Report

GA2007

45 DEPRESSION

52 WEATHERING/RAVELING

Report Generated Date: 1/8/2008

Site Name: Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD Name: APRON 01 Use: APRON Area: 616,265.00SqFt Branch: A01AB Section: From: TAXIWAY I To: TAXIWAY B Last Const.: 6/1/1988 10 of Family: 2007GAAACAPRON3 Zone: Category: Rank: P Surface: AAC Area: 616,265.00SqFt Length: 500.00Ft Width: 350.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Total Samples: 124 Surveyed: 14 Last Insp. Date7/9/2007 Conditions: PCI:70.00 | Inspection Comments: all unsealed 5,000.00SqFt PCI = 65Sample Number: 04 Type: R Area: Sample Comments: 43 BLOCK CRACKING 999.99 SqFt Comments: L 366.09 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING L Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 40.01 Ft Comments: 42 BLEEDING 35.00 SqFt Comments: Ν Sample Number: 15 PCI = 70Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 440.11 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 230.06 Ft Comments: PCI = 64Sample Number: 20 Type: R Area: 5,000.00SqFt Sample Comments: 43 BLOCK CRACKING L 4,999.96 SqFt Comments: Sample Number: 27 PCI = 64Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 430.11 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 85.02 Ft M Comments: 42 BLEEDING Ν 64.00 SqFt Comments: 41 ALLIGATOR CRACKING М 15.00 SqFt Comments: PCI = 73Sample Number: 34 Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 465.12 Ft Comments: L 48 LONGITUDINAL/TRANSVERSE CRACKING 130.03 Ft Μ Comments: PCI = 82Sample Number: 38 Area: 5,000.00SqFt Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 230.06 Ft Comments: L 42 BLEEDING Ν 33.00 SqFt Comments: PCI = 77Sample Number: 46 5,000.00SqFt Type: R Area: Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 320.08 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 85.02 Ft Μ Comments: 42 BLEEDING Ν 5.00 SqFt Comments: 5,000.00SqFt PCI = 82Sample Number: 58 Type: R Area: Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 250.06 Ft Comments:

16.00 SqFt

10.00 SqFt

Comments:

Comments:

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Re-inspection Report

GA2007

Report Generated Date: 1/8/2008

Site Name:

Sample Number: 72 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 76
48 LONGITUDINAL/TRANSVERSE CRACKING	L	350.09 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	90.02 Ft	Comments:
Sample Number: 80 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 68
48 LONGITUDINAL/TRANSVERSE CRACKING	L	360.09 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	110.03 Ft	Comments:
41 ALLIGATOR CRACKING	L	30.00 SqFt	Comments:
42 BLEEDING	N	20.00 SqFt	
Sample Number: 89 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 48
41 ALLIGATOR CRACKING	M	120.00 SqFt	Comments:
42 BLEEDING	N	30.00 SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	460.12 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	М	115.03 Ft	Comments:
Sample Number: 96 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 66
48 LONGITUDINAL/TRANSVERSE CRACKING	L	490.13 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	120.03 Ft	Comments:
41 ALLIGATOR CRACKING	M	12.00 SqFt	Comments:
Sample Number: 110 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 85
48 LONGITUDINAL/TRANSVERSE CRACKING	L	200.05 Ft	Comments:
50 PATCHING	L	5.00 SqFt	Comments:
Sample Number: 118 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 63
42 BLEEDING	N	80.00 SqFt	Comments:
56 SWELLING	L	75.00 SqFt	
50 PATCHING	M	39.00 SqFt	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	320.08 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	68.02 Ft	Comments:
	••	13.02 10	

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD

Branch: Name: RUNWAY 14/32 Use: RUNWAY Area: R1432AB 333,605.00SqFt

Section: 10 of 1 From: 14 APPROACH To: 32 APPROACH Last Const.: 6/1/1984

Surface: Family: Zone: Category: Rank: S AAC 100.00Ft

Area: 333,605.00SqFt Length: 4,158.00Ft Width:

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Surveyed: 7 Last Insp. Date7/10/2007 Total Samples: 67

Conditions: PCI:47.00 Inspection Comments: all sealant is failed (med)	•				
Sample Number: 05 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 40
48 LONGITUDINAL/TRANSVERSE CRACKING		L	55.01	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		M	60.02	Ft	Comments:
56 SWELLING		L	80.00	SqFt	Comments:
43 BLOCK CRACKING		M	2,499.98		Comments:
43 BLOCK CRACKING		L	999.99		Comments:
Sample Number: 13 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 49
43 BLOCK CRACKING		M	3,299.97	SqFt	Comments:
43 BLOCK CRACKING		L	1,699.99		Comments:
42 BLEEDING		N	8.00		Comments:
Sample Number: 23 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 50
43 BLOCK CRACKING		M	3,299.97	SqFt	Comments:
43 BLOCK CRACKING		L	1,699.99		Comments:
Sample Number: 33 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 49
43 BLOCK CRACKING		L	1,499.99	SqFt	Comments:
43 BLOCK CRACKING		M	3,499.97		Comments:
Sample Number: 43 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 51
43 BLOCK CRACKING		M	2,999.98	SqFt	Comments:
43 BLOCK CRACKING		L	1,999.98	SqFt	Comments:
Sample Number: 53 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 42
48 LONGITUDINAL/TRANSVERSE CRACKING		L	20.01		Comments:
43 BLOCK CRACKING		M	2,999.98		Comments:
43 BLOCK CRACKING		L	1,699.99	SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		M	12.00	Ft	Comments:
Sample Number: 63 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 49
48 LONGITUDINAL/TRANSVERSE CRACKING		L	341.09	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		M	414.11	Ft	Comments:
43 BLOCK CRACKING		L	600.00	SqFt	Comments:6x6
43 BLOCK CRACKING		M	600.00	Sart	Comments:

GA2007

Sample Comments:
<NO DISTRESSES>

Report Generated Date: 1/8/2008

Site Name: Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD Use: RUNWAY Branch: R826AB Name: RUNWAY 8/26 Area: 787,037.00SqFt Section: of From: 8 APPROACH To: 26 APPROACH Last Const.: 6/1/2003 10 Surface: Family: Zone: Category: Rank: P AAC Area: 787,037.00SqFt Length: 5,796.00Ft Width: 100.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Last Insp. Date7/10/2007 Total Samples: 156 Surveyed: 16 Conditions: PCI:100.00 | Inspection Comments: Sample Number: 03 5,000.00SqFt PCI = 100Type: R Area: Sample Comments: <NO DISTRESSES> Sample Number: 13 Type: R Area: 5,000.00SqFt PCI = 100Sample Comments: <NO DISTRESSES> Sample Number: 23 PCI = 100Type: R Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES> Sample Number: 33 PCI = 100Type: R Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES> PCI = 100Sample Number: 43 Type: R Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES> PCI = 100Sample Number: 53 Type: R Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES> Sample Number: 63 Type: R Area: 5,000.00SqFt PCI = 100Sample Comments: <NO DISTRESSES> PCI = 100Sample Number: 73 Type: R Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES> PCI = 100Sample Number: 83 Type: R Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES> Type: R PCI = 100Sample Number: 93 Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES> Type: R PCI = 100Sample Number: 103 Area: 5,000.00SqFt

GA2007

Report Generated Date: 1/8/2008

Site Name:

<NO DISTRESSES>

Sample Number: 113 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 119 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 126 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 138 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 152 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 100	

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD

Branch: R927AB Name: RUNWAY 9/27 Use: RUNWAY Area: 171,580.00SqFt

Section: 1 From: 9 APPROACH To: 27 APPROACH Last Const.: 6/1/1989 10 of

60.00Ft

Surface: Family: Zone: Category: Rank: S AAC

Area: 171,580.00SqFt Length: 2,801.00Ft Width: Lanes: 0 Shoulder: Street Type: Grade: 0.00

Section Comments:

Last Insp. Date7/10/2007 Total Samples: 31 Surveyed: 7

Conditions: PCI:57.00 | Inspection Comments:

Sample Number:	02	Type: R	Area:	5,400.00SqFt	PCI = 52
Sample Number.	02	Type. K	Alea.	3,400.00 5 qFt	$\Gamma CI = JZ$
C 1 - C 4					

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 795.20 Ft Μ Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 100.03 Ft Comments:

Sample Number: 06 Type: R Area: 5,400.00SqFt PCI = 56Sample Comments:

Η Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 8.00 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING L 180.05 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 440.11 Ft Comments: Μ

56 SWELLING L 5.00 SqFt Comments:

Sample Number: 10 Type: R Area: 5,400.00SqFt PCI = 54Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 115.03 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 680.17 Ft Comments:

5,400.00SqFt PCI = 54Sample Number: 14 Type: R Area: Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 700.18 Ft Comments: Μ

48 LONGITUDINAL/TRANSVERSE CRACKING Τ. 120.03 Ft Comments:

5,400.00SqFt PCI = 64Sample Number: 18 Type: R Area:

Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 380.10 Ft Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 200.05 Ft Comments: \mathbf{L}

Sample Number: 22 PCI = 56Type: R Area: 5,400.00SqFt

Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 610.16 Ft Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 200.05 Ft \mathbf{L} Comments:

PCI = 59Sample Number: 26 Type: R Area: 5,400.00SqFt

Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 510.13 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 150.04 Ft Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD

Branch: T927AB Name: TAXIWAY 9/27 Use: TAXIWAY Area: 110,181.00SqFt

Section: From: 9 APPROACH To: 27 APPROACH Last Const.: 6/1/1989 10 of

40.00Ft

Surface: Family: 2007GAAACTWYGANORTH Zone: Category: Rank: P $\mathsf{A}\mathsf{A}\mathsf{C}$

Area: 44,864.00SqFt Length: 960.00Ft Width: Grade: 0.00 Lanes: 0

Shoulder: Street Type: Section Comments:

Last Insp. Date7/10/2007 Total Samples: 9 Surveyed: 4

Conditions: PCI:52.00 | Inspection Comments:

Sample Number:	02	Type: R	Area:	4,400.00SqFt	PCI = 34
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Sample Comments:

41 ALLIGATOR CRACKING 1,399.99 SqFt Comments: L 48 LONGITUDINAL/TRANSVERSE CRACKING L 320.08 Ft Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 180.05 Ft Μ Comments:

Sample Number: 04 Type: R Area: 4,400.00SqFt PCI = 55

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING Μ 530.14 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 180.05 Ft Comments:

Area: PCI = 55

Sample Number: 05 Type: R 4,400.00SqFt Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 550.14 Ft Comments: Μ 48 LONGITUDINAL/TRANSVERSE CRACKING L 150.04 Ft Comments:

Sample Number: 08 Area: 5,500.00SqFt PCI = 63Type: R

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING Μ 430.11 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 120.03 Ft Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD

Use: TAXIWAY Branch: T927AB Name: TAXIWAY 9/27 Area: 110,181.00SqFt

Section: From: Runway 9-27 To: End Last Const.: 6/1/1999 20 of

175.00Ft

Surface: Family: 2007GAACTWYGA Zone: Category: Rank: S AC Width:

Area: 65,317.00SqFt Length: 330.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date7/10/2007 Total Samples: 11 Surveyed: 5

Conditions: PCI:84.00 | Inspection Comments:

Sample Number: 02 Type: R Area: PCI = 854,800.00SqFt

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 240.06 Ft Comments:

Sample Number: 05 Type: R Area: 5,250.00SqFt PCI = 83

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 320.08 Ft L Comments:

Sample Number: 06 PCI = 85Type: R Area: 5,250.00SqFt

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 275.07 Ft Comments:

Sample Number: 08 PCI = 83Type: R Area: 5,000.00SqFt

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 315.08 Ft Comments: L

Sample Number: 11 PCI = 84Type: R Area: 5,000.00SqFt

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 280.07 Ft Comments:

GA2007

Report Generated Date: 1/8/2008

43 BLOCK CRACKING

Site Name:

Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD Use: TAXIWAY Branch: **TAAB** Name: TAXIWAY A Area: 167,151.00SqFt From: 14 APPROACH To: 32 APPROACH Last Const.: 6/1/1984 Section: 10 of Family: 2007GAAACTWYGANORTH Surface: AAC Zone: Category: Rank: S Area: 167,151.00SqFt Length: 4,041.00Ft Width: 40.00Ft Lanes: 0 Shoulder: Street Type: Grade: 0.00 Section Comments: Total Samples: 34 Surveyed: 7 Last Insp. Date7/10/2007 Conditions: PCI:36.00 | Inspection Comments: Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 53Sample Comments: 43 BLOCK CRACKING 2,499.98 SaFt L Comments: 43 BLOCK CRACKING 2,499.96 SqFt Μ Comments: Sample Number: 07 Type: R Area: 5,000.00SqFt PCI = 33Sample Comments: 41 ALLIGATOR CRACKING Μ 200.00 SqFt Comments: 43 BLOCK CRACKING 3,599.97 SqFt \mathbf{L} Comments:5x5 43 BLOCK CRACKING 1,199.99 SqFt M Comments: Sample Number: 10 Area: 5,000.00SqFt PCI = 32Type: R Sample Comments: 120.00 SqFt Comments: 41 ALLIGATOR CRACKING Μ 48 LONGITUDINAL/TRANSVERSE CRACKING L 60.02 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING M 35.01 Ft Comments: 43 BLOCK CRACKING 2,499.96 SqFt Τ, Comments: 43 BLOCK CRACKING 1,499.98 SqFt Μ Comments: Sample Number: 15 Type: R 5,000.00SqFt PCI = 28Area: Sample Comments: 42 BLEEDING 3.00 SqFt Comments: Ν 41 ALLIGATOR CRACKING 300.00 SqFt M Comments: 43 BLOCK CRACKING 2,499.98 SqFt \mathbf{L} Comments: 43 BLOCK CRACKING Μ 2,199.98 SqFt Comments: Sample Number: 20 PCI = 27Type: R Area: 5,000.00SqFt Sample Comments: 42 BLEEDING Ν 1.00 SqFt Comments: 41 ALLIGATOR CRACKING 350.00 SqFt M Comments: 43 BLOCK CRACKING \mathbf{L} 2,324.98 SqFt Comments: 43 BLOCK CRACKING Μ 2,324.96 SqFt Comments: Sample Number: 25 Type: R 5,000.00SqFt PCI = 30Area: Sample Comments: 41 ALLIGATOR CRACKING Μ 150.00 SqFt Comments: 43 BLOCK CRACKING L 1,999.98 SqFt Comments: 43 BLOCK CRACKING Μ 1,749.99 SqFt Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 55.01 Ft Comments: \mathbf{L} 48 LONGITUDINAL/TRANSVERSE CRACKING 30.01 Ft Comments: Μ Sample Number: 31 Area: 5,000.00SqFt PCI = 52Type: R Sample Comments:

1,249.99 SqFt

Comments:

L

GA2007

Report Generated Date: 1/8/2008

Site Name:

43	BLOCK CRACKING	M	1,249.98	SqFt	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	M	123.03	Ft	Comments:
48	LONGITUDINAL/TRANSVERSE CRACKING	L	88.04	Ft	Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD

Branch: TBAB Name: TAXIWAY B Use: TAXIWAY Area: 183,146.00SqFt

Section: 10 of 1 From: 14 APPROACH To: 32 APPROACH Last Const.: 6/1/1984

40.00Ft

Surface: AAC Family: 2007GAAACTWYGANORTH Zone: Category: Rank: S

Area: 183,146.00SqFt Length: 3,968.00Ft Width:

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date7/10/2007 Total Samples: 38 Surveyed: 7

Conditions: PCI:39.00 | Inspection Comments:

Inspection Comments:					
Sample Number: 02 Type: R	Area:	5,000.00SqFt		PCI = 49	
Sample Comments:	1. A	226 06	₽+	Commonta	
48 LONGITUDINAL/TRANSVERSE CRACKING	M L	236.06 146.04		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 43 BLOCK CRACKING	Г	849.99		Comments:	
43 BLOCK CRACKING	М	699.99	_	Comments:	
52 WEATHERING/RAVELING	I ^M L	500.00		Comments:	
			5qr c	Commencs.	
Sample Number: 05 Type: R Sample Comments:	Area:	5,000.00SqFt		PCI = 51	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	131.03	Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	170.04	Ft	Comments:	
56 SWELLING	L	30.00	SqFt	Comments:	
43 BLOCK CRACKING	L	999.99	SqFt	Comments:	
43 BLOCK CRACKING	M	550.00	SqFt	Comments:	
52 WEATHERING/RAVELING	L	300.00	SqFt	Comments:	
Sample Number: 10 Type: R Sample Comments:	Area:	5,000.00SqFt		PCI = 33	
41 ALLIGATOR CRACKING	M	150.00	SqFt	Comments:	
42 BLEEDING	N	12.00	SqFt	Comments:	
43 BLOCK CRACKING	L	1,499.99	SqFt	Comments:	
43 BLOCK CRACKING	M	1,249.99	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	220.06		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	85.02	Ft	Comments:	
Sample Number: 17 Type: R Sample Comments:	Area:	5,000.00SqFt		PCI = 26	
41 ALLIGATOR CRACKING	М	400.00	SaFt	Comments:	
43 BLOCK CRACKING	L	1,599.99		Comments:	
43 BLOCK CRACKING	M	1,399.99		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	180.05		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	50.01		Comments:	
Sample Number: 23 Type: R Sample Comments:	Area:	5,000.00SqFt		PCI = 23	
41 ALLIGATOR CRACKING	M	550.00	SqFt	Comments:	
43 BLOCK CRACKING	L	1,799.99		Comments:	
43 BLOCK CRACKING	M	1,399.99		Comments:	
42 BLEEDING		=	-		
12 DEEDING	N	5.00	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	N L	5.00 120.03	-	Comments:	

GA2007

Report Generated Date: 1/8/2008

Site Name:

Sample Number: 30 Type: R	Area:	5,000.00SqFt	PCI = 36	
Sample Comments:				
43 BLOCK CRACKING	L	1,999.98	SqFt Comments:	
43 BLOCK CRACKING	M	999.99	SqFt Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	180.05	Ft Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	40.01	Ft Comments:	
41 ALLIGATOR CRACKING	M	100.00	SqFt Comments:	
Sample Number: 34 Type: R	Area:	5,000.00SqFt	PCI = 53	
Sample Comments:	Aica.	3,000.003q11	1 C1 = 33	
48 LONGITUDINAL/TRANSVERSE CRACKING	М	125.03	Ft Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	20.01	Ft Comments:	
42 BLEEDING	N	5.00	SaFt Comments:	
43 BLOCK CRACKING	L	3,249.97	-	
43 BLOCK CRACKING	M	500.00	-	
	••	200.00	- 1- 0	

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD

Branch: TGAB Name: TAXIWAY G Use: TAXIWAY Area: 27,568.00SqFt

Section: 10 of 1 From: TAXIWAY B To: TAXIWAY I Last Const.: 6/1/1984

40.00Ft

Surface: AAC Family: 2007GAAACTWYGANORTH Zone: Category: Rank: S

Area: 27,568.00SqFt Length: 604.00Ft Width:

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date7/10/2007 Total Samples: 5 Surveyed: 4

Conditions: PCI:23.00 | Inspection Comments:

Inspection Comments:			
Sample Number: 01 Type: R Sample Comments:	Area:	5,205.00SqFt	PCI = 20
41 ALLIGATOR CRACKING	M	799.99 SqFt	Comments:
43 BLOCK CRACKING	L	849.99 SqFt	Comments:
43 BLOCK CRACKING	M	400.00 SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	250.06 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	200.05 Ft	Comments:
Sample Number: 02 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 20
41 ALLIGATOR CRACKING	M	749.99 SqFt	Comments:
43 BLOCK CRACKING	L	699.99 SqFt	Comments:
43 BLOCK CRACKING	M	300.00 SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	400.10 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	200.05 Ft	Comments:
Sample Number: 03 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 29
41 ALLIGATOR CRACKING	M	500.00 SqFt	Comments:
43 BLOCK CRACKING	L	1,199.99 SqFt	Comments:
43 BLOCK CRACKING	M	300.00 SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	250.06 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	150.04 Ft	Comments:
Sample Number: 04 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 22
41 ALLIGATOR CRACKING	М	600.00 SqFt	Comments:
43 BLOCK CRACKING	L	500.00 SqFt	Comments:
43 BLOCK CRACKING	M	300.00 SqFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	350.09 Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING	M	150.04 Ft	Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name: Network: ATL-FTY Name: FULTON COUNTY-BROWN FIELD Use: TAXIWAY Branch: TIAB Name: TAXIWAY I Area: 368,085.00SqFt From: 8 APPROACH To: 26 APPROACH Section: 10 of Last Const.: 6/1/1985 Family: 2007GAAACTWYGANORTH Surface: AAC Zone: Category: Rank: P Area: Length: 5,910.00Ft Width: 60.00Ft 368,085.00SqFt Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Total Samples: 69 Surveyed: 8 Last Insp. Date7/10/2007 Conditions: PCI:30.00 | Inspection Comments: Sample Number: 05 Type: R Area: 5,400.00SqFt PCI = 61Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 480.12 Ft \mathbf{L} Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 350.09 Ft Comments: 42 BLEEDING Ν 45.00 SqFt Comments: Sample Number: 10 Type: R Area: 5,400.00SqFt PCI = 27Sample Comments: 41 ALLIGATOR CRACKING Μ 420.00 SqFt Comments: 43 BLOCK CRACKING L 999.99 SqFt Comments: 43 BLOCK CRACKING Μ 799.99 SqFt Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING M 160.04 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 135.03 Ft Comments: Sample Number: 20 PCI = 22Type: R Area: 5,400.00SqFt Sample Comments: 42 BLEEDING Comments: Ν 50.00 SqFt 639.99 SqFt 41 ALLIGATOR CRACKING Μ Comments: 53 RUTTING 50.00 SqFt L Comments: 420.11 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING \mathbf{L} Comments: 300.08 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING Μ Comments: Sample Number: 32 Area: 5,400.00SqFt PCI = 26Type: R Sample Comments: 41 ALLIGATOR CRACKING Μ 450.00 SqFt Comments: 43 BLOCK CRACKING L 999.99 SqFt Comments: 43 BLOCK CRACKING Μ 999.98 SqFt Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 320.08 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 270.07 Ft Μ Comments: PCI = 26Sample Number: 39 Type: R Area: 5,400.00SqFt Sample Comments: 360.00 SqFt Comments: 41 ALLIGATOR CRACKING Μ 53 RUTTING L 20.00 SqFt Comments: 42 BLEEDING Ν 2.00 SqFt Comments: 1,299.99 SqFt Comments: 43 BLOCK CRACKING Τ, 999.99 SqFt Comments: 43 BLOCK CRACKING M 280.07 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING L Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 160.04 Ft Comments: 52 WEATHERING/RAVELING L 300.00 SqFt Comments:

Sample Number: 52 Type: R Area: 5,400.00SqFt PCI = 26 Sample Comments:

53 RUTTING L 25.00 SqFt Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name:

52 WEATHERING/RAVELING 41 ALLIGATOR CRACKING 43 BLOCK CRACKING 43 BLOCK CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	L M L M L	400.00 330.00 999.99 400.00 450.12 180.05	SqFt Comments: SqFt Comments: SqFt Comments: Ft Comments:	
Sample Number: 61 Type: R Sample Comments:	Area:	5,400.00SqFt	PCI = 28	
41 ALLIGATOR CRACKING	M	400.00	SqFt Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	720.18	Ft Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	390.10	Ft Comments:	
52 WEATHERING/RAVELING	L	200.00	SqFt Comments:	
Sample Number: 68 Type: R Sample Comments:	Area:	5,400.00SqFt	PCI = 25	
41 ALLIGATOR CRACKING	M	500.00	SqFt Comments:	
42 BLEEDING	N	8.00	SqFt Comments:	
43 BLOCK CRACKING	L	1,099.99	SqFt Comments:	
43 BLOCK CRACKING	M	600.00	_	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	320.08		
48 LONGITUDINAL/TRANSVERSE CRACKING	M	120.03	Ft Comments:	

APPENDIX D

MAINTENANCE POLICIES AND UNIT COSTS

Table D-1. Localized maintenance policy, asphalt-surfaced pavements.

Distress Type	Severity Level	Maintenance Action
	Low	Monitor
Alligator Cracking	Medium	Patch
	High	Patch
Bleeding	N/A	Monitor
	Low	Monitor
Block Cracking	Medium	Crack Seal
	High	Crack Seal
	Low	Monitor
Corrugation	Medium	Patch
C	High	Patch
	Low	Monitor
Depression	Medium	Patch
Tr The state of	High	Patch
Jet Blast	N/A	Patch
	Low	Monitor
Joint Reflection Cracking	Medium	Crack Seal
8	High	Crack Seal
	Low	Monitor
Longitudinal and	Medium	Crack Seal
Transverse Cracking	High	Crack Seal
Oil Spillage	N/A	AC Patch
on spinings	Low	Monitor
Patching	Medium	Monitor
I woming	High	Patch
Polished Aggregate	N/A	Monitor
Tonshed riggregate	Low	Monitor
Raveling and Weathering	Medium	Patch
Traveling and Weathering	High	Patch
	Low	Monitor
Rutting	Medium	Patch
Rutting	High	Patch
	Low	Monitor
Shoving	Medium	Patch
Shoving	High	Patch
Slippage Cracking	N/A	Patch
Shippage Clacking	Low	Monitor
Swelling	Medium	Patch
Sweiling		Patch
	High	raich

Table D-2. Localized maintenance policy, portland cement concrete pavements.

Distress Type	Severity Level	Maintenance Action				
	Low	Slab Replacement				
Blow-Up	Medium	Slab Replacement				
	High	Slab Replacement				
	Low	Crack Seal				
Corner Break	Medium	Patch				
	High	Patch				
	Low	Crack Seal				
Cracks	Medium	Crack Seal				
	High	Crack Seal				
	Low	Monitor				
Durability Cracking	Medium	Slab Replacement				
	High	Slab Replacement				
	Low	Monitor				
Joint Seal Damage	Medium	Joint Seal				
	High	Joint Seal				
	Low	Monitor				
Patching	Medium	Patch				
	High	Patch				
Popouts	N/A	Monitor				
Pumping	N/A	Monitor				
	Low	Monitor				
Scaling	Medium	Slab Replacement				
	High	Slab Replacement				
	Low	Monitor				
Settlement	Medium	Monitor				
	High	Grinding				
	Low	Crack Seal				
Shattered Slab	Medium	Slab Replacement				
	High	Slab Replacement				
Shrinkage	N/A	Monitor				
Spalling (Joint and	Low	Monitor				
Corner)	Medium	Patch				
Corner	High	Patch				

Table D-3. Unit costs for localized maintenance actions, general aviation airports.

Maintenance Action	Unit Cost				
Wantenance Action	Metro	North	South		
AC Patching	\$3.15/sf	\$2.76/sf	\$2.72/sf		
Crack Sealing – AC	\$1.13/lf	\$0.85/lf	\$0.85/lf		
Crack Sealing – PCC	\$3.90/lf	\$3.25/lf	\$3.25/lf		
Joint Sealing – PCC	\$3.30/lf	\$2.75/lf	\$2.75/lf		
PCC Partial Depth Patch	\$10.86/sf	\$10.86/sf	\$10.86/sf		
PCC Full Depth Patch	\$36.67/sf	\$36.67/sf	\$36.67/sf		
Slab Replacement	\$36.67/sf	\$36.67/sf	\$36.67/sf		
Grinding	\$0.36/sf	\$0.36/sf	\$0.36/sf		

Table D-4. Unit costs for localized maintenance actions, commercial service airports.

Maintenance Action	Unit Cost
AC Patching	\$3.15/sf
Crack Sealing – AC	\$3.90/lf
Crack Sealing – PCC	\$3.90/lf
Joint Sealing – PCC	\$3.30/lf
PCC Partial Depth Patch	\$10.86/sf
PCC Full Depth Patch	\$36.67/sf
Slab Replacement	\$36.67/sf
Grinding	\$0.36/sf

Table D-5. Unit costs for global maintenance actions, general aviation airports.

Maintenance Action	Unit Cost				
Maintenance Action	Metro	North	South		
Single Surface Treatment	\$0.47/sf	\$0.17/sf	\$0.18/sf		
Pavement Rejuvenator	\$0.15/sf	\$0.15/sf	\$0.15/sf		

Table D-6. Unit costs for global maintenance actions, commercial service airports.

Maintenance Action	Unit Cost
Single Surface Treatment	\$0.74/sf
Pavement Rejuvenator	\$0.16/sf

Table D-7. Major rehabilitation unit costs based on PCI ranges for asphalt-surfaced pavements.

General		PCI Range								
Aviation	0 – 29	30 – 39	40 – 49	50 – 59	60 – 69	70 – 79	80 – 89	> 89		
Metro	\$4.78/sf	\$4.78/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf		
North	\$4.21/sf	\$4.21/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf		
South	\$4.27/sf	\$4.27/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf		
Commercial Service	\$5.19/sf	\$5.19/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf		

Table D-8. Major rehabilitation unit costs based on PCI ranges for PCC-surfaced pavements.

General		PCI Range									
Aviation	0 – 29	30 – 39	40 – 49	50 – 59	60 – 69	70 – 79	80 – 89	> 89			
Metro	\$12.95/sf	\$12.95/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf	\$1.65/sf			
North	\$12.83/sf	\$12.83/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf	\$1.17/sf			
South	\$12.89/sf	\$12.89/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf	\$1.08/sf			
Commercial Service	\$12.95/sf	\$12.95/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf	\$1.31/sf			

APPENDIX E

YEAR 2008 MAINTENANCE PLAN ORGANIZED BY SECTION

Table E-1. 2008 maintenance plan organized by section.

Branch	Section	Distress Type	Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
A01AB	10	Patching	Medium	Patching - AC Deep	422	SqFt	\$3.15	\$1,329
A01AB	10	Alligator cracking	Medium	Patching - AC Deep	1,443	SqFt	\$3.15	\$4,545
A01AB	10	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	9,449	Ft	\$1.13	\$10,677

APPENDIX F

YEAR 2008 MAINTENANCE PLAN ORGANIZED BY REPAIR TYPE

Table F-1. 2008 maintenance plan organized by repair type.

Branch	Section	Distress Type	Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
A01AB	1()	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	9,449	Ft	\$1.13	\$10,677
A01AB	10	Patching	Medium	Patching - AC Deep	422	SqFt	\$3.15	\$1,329
A01AB	10	Alligator cracking	Medium	Patching - AC Deep	1,443	SqFt	\$3.15	\$4,545

APPENDIX G

FAA AC 150/5380-6B



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Prepared by:





