COBB COUNTY-MCCOLLUM FIELD PAVEMENT MANAGEMENT REPORT

2007 GEORGIA AIRPORT PAVEMENT MANAGEMENT REPORT



Preserving Georgia's Critical Airport Pavement Infrastructure

Acknowledgement

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COBB COUNTY-MCCOLLUM FIELD

PAVEMENT MANAGEMENT REPORT



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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 Cobb County-McCollum 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.

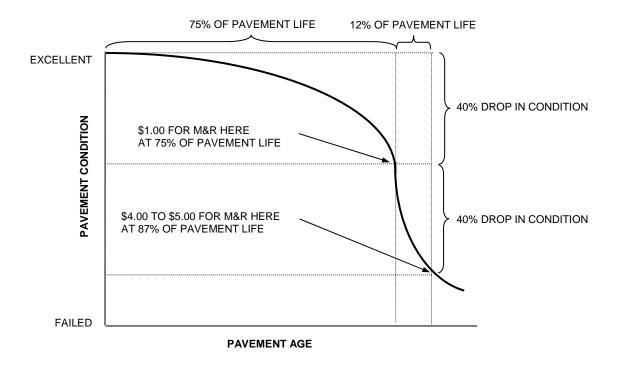


Figure 1. Pavement condition versus cost of repair.

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.

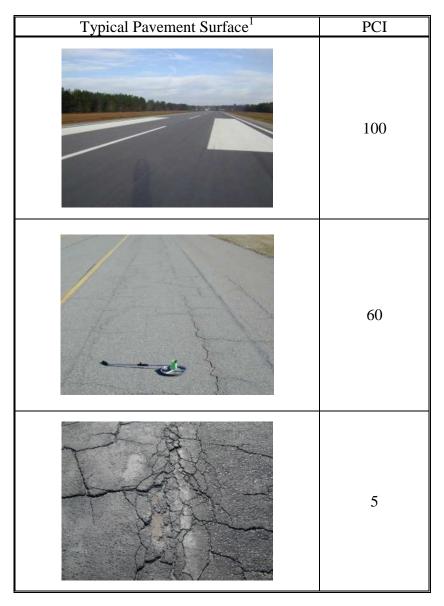


Figure 2. Visual representation of PCI scale.

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 Cobb County-McCollum 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

Cobb County-McCollum Field has over 2,411,963 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.

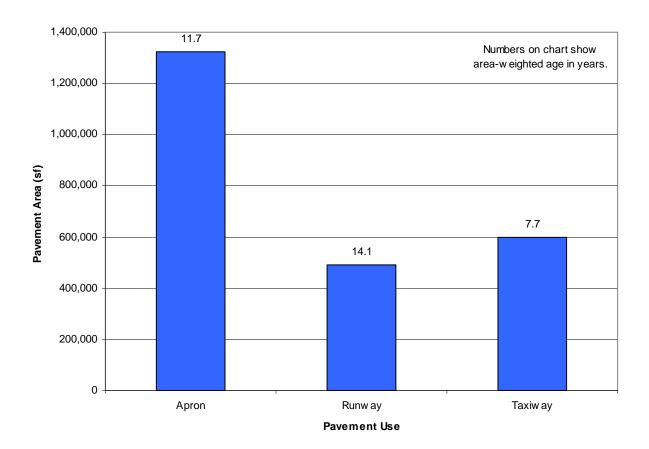


Figure 4. Pavement inventory.

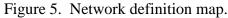


Figure 5. Network definition map. (11 x 17 except for very large airports that need larger map folded into a map sleeve)

Pavement Evaluation

The inspection of Cobb County-McCollum Field was completed on July 9, 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 of Cobb County-McCollum Field was completed on July 9th, 2007. Eighteen sections were defined during the inspection

Runway 9-27 is defined by two sections. R927MR-10 is in fair condition with a PCI value of 69. Low and medium-severity longitudinal and transverse (L&T) cracking were identified throughout the section. The majority of cracking was sealed, however most of the sealant was failed. In addition, isolated areas of bleeding and patching were recorded. Section R927MR-20 is the new 950 foot extension to the east end of the runway that is in excellent condition with a PCI of 100. No distress was observed in this section at the time of inspection.

Taxiway A runs parallel to the Runway on the north side. This taxiway is defined by three sections. Section TAMR-10 is in poor condition with a PCI value of 40. Significant amounts of low and medium-severity L&T cracking were identified. The majority of the cracking was sealed, however most of sealant was failed. In addition, moderate amounts of medium-severity alligator cracking and low-severity rutting, patching, and raveling and weathering were recorded throughout the section. Section TAMR-20 was split out separately from TAMR-10 due to the high quantities of medium-severity alligator cracking and rutting causing it to be in serious condition with a PCI value of 14. TAMR-30 was recently constructed along with the runway extension and is in excellent condition with a PCI value of 100 and no distress observed.

Taxiway B is defined by one section, TBMR-10, that runs parallel to the runway on the south side. TBMR-10 was recently rehabilitated and is in excellent condition with a PCI value of 96. Only small amounts of low-severity L&T cracking and patching were observed, mostly along the paving lane joints.

Apron 01 was divided into seven sections due to changes in pavement construction or pavement type. All sections are constructed of asphalt.

A01MR-10, located north of the runway at the southeast corner of the main apron, is in serious condition with a PCI value of 28. Significant amounts of medium-severity alligator cracking, unsealed block cracking, and oil spillage were observed throughout. Moderate quantities of low-severity L&T cracking and patching were also found.

A01MR-20 is located next to A01MR-10 and is in excellent condition with a PCI value of 100. No distress was observed in this section as it had just been rehabilitated.

A01MR-30, located in the center of the main apron north of the runway is in good condition with a PCI value of 83. Moderate amounts of low and medium-severity, unsealed, L&T cracking were observed in this section, along with an isolated area of alligator cracking.

A01MR-40 covers the west side of the north apron. This section is in good condition with a PCI value of 85. Low-severity, unsealed, L&T cracking, located mainly along paving lane joints,

was observed throughout the section, along with small amounts of raveling and weathering and alligator cracking.

A01MR-50 is located in the northern part of the main apron and is in serious condition with a PCI value of 29. Significant amounts of medium-severity alligator and L&T cracking were identified in this section. Moderate quantities of medium-severity block cracking, raveling and weathering, and patching were also observed. Most of the low-severity cracking was unsealed while medium-severity cracking was recorded due to failed sealant.

A01MR-60 is located on the east edge of the north apron running parallel to the main road. This section is in poor condition with a PCI value of 56. Moderate amounts of low and medium-severity L&T cracking and raveling and weathering were recorded. In addition, isolated areas of patching, alligator cracking, and depression were observed. The majority of the cracking was unsealed.

A01MR-70 is a newly constructed section located to the east of section A01MR-10 by the Air Traffic Control tower. It is in excellent condition with a PCI value of 100 and no observed distresses during the inspection.

Apron 02 was divided into three sections due to changes in pavement construction. All sections were constructed of asphalt.

A02MR-10, located in the center of the south apron, is in fair condition with a PCI value of 67. Moderate amounts of low-severity block and L&T cracking were identified throughout the section. Moderate amounts of medium-severity L&T, alligator cracking, and raveling and weathering were also observed. The majority of the cracking was sealed, most of which was failed.

A02MR-20 covers the eastern part of the south apron and is in good condition with a PCI value of 85. Small amounts of low and medium-severity L&T cracking were recorded along with isolated areas of patching and bleeding.

A02MR-30 is located to the west of A02MR-10. This section is also in good condition with a PCI value of 88. Small amounts of low and medium-severity L&T cracking were observed along with an area of low-severity rutting.

A03MR-10 consists of one section, and is located on the west end of the south apron. This section is in poor condition with a PCI value of 49. Moderate amounts of low and medium-severity L&T cracking, patching, raveling and weathering, and alligator cracking were identified throughout the section. Most of the cracking was sealed, however most of the crack sealant was failed and the cracks had vegetation growing in them.

The run up apron area located off of the parallel Taxiway A is defined by one section, ARUNUPMR-10. This section is in excellent condition with a PCI value of 100. No distresses were recorded at the time of inspection.

Overall Pavement Condition

The 2007 area-weighted condition of Cobb County-McCollum Field is 75, with conditions ranging from 14 to 100 [on a scale of 0 (failed) to 100 (excellent)]. This compares to a 2001 PCI of 76.

Figures 6 and 7 provide graphs summarizing the overall condition of the pavements at Cobb County-McCollum 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.

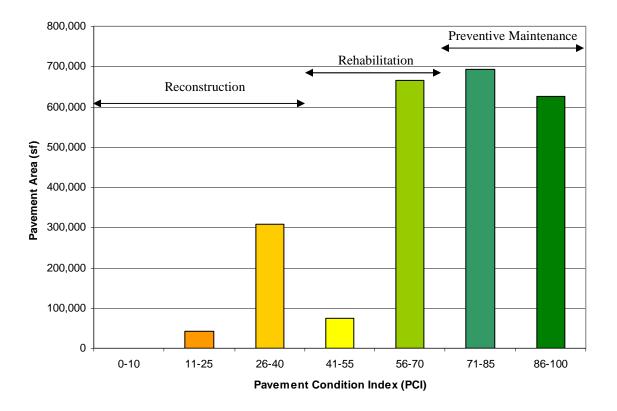


Figure 6. Condition distribution.

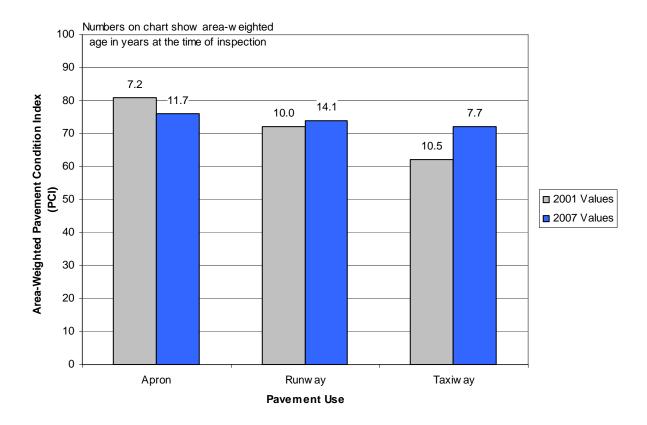


Figure 7. Condition by use.

Figure 8. PCI Map (11 x 17)

Table 2. Pavement evaluation results.

							% Distress 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
A01MR	10	AC	22,773	6/1/1975	36	28	56	29	PATCHING , Alligator cracking, Block cracking, L&T Cracking, Oil Spillage
A01MR	20	AC	9,818	6/1/2006	16	100	0	0	No distress
A01MR	30	AC	118,615	6/2/1998	89	83	33	67	Alligator cracking, L&T Cracking
A01MR	40	AAC	483,309	6/1/1998	96	85	36	64	Alligator cracking, L&T Cracking, Raveling & Weathering
A01MR	50	AC	87,532	6/2/1989	35	29	46	54	Alligator cracking, Block cracking, L&T Cracking, Patching, Raveling & Weathering
A01MR	60	AC	84,297	6/2/1989	66	56	20	79	Alligator cracking, Depression, L&T Cracking, Patching, Raveling & Weathering
A01MR	70	AC	142,121	6/3/2004	N/A	100	0	0	No distress
A02MR	10	AC	163,250	6/2/1989	69	67	0	98	Bleeding, Block cracking, L&T Cracking, Raveling & Weathering
A02MR	20	AAC	91,750	6/1/1999	100	85	0	100	Bleeding, L&T Cracking, Patching
A02MR	30	AAC	20,000	6/1/1999	100	88	42	58	L&T Cracking, Rutting
A03MR	10	AC	75,000	6/2/1981	65	49	28	72	Alligator cracking, L&T Cracking, Patching, Raveling & Weathering
ARUNUPMR	10	AC	25,390	6/1/2005	N/A	100	0	0	No distress
R927MR	10	AAC	418,741	6/1/1991	72	69	0	100	Bleeding, L&T Cracking, Patching
R927MR	20	AC	71,592	6/1/2004	N/A	100	0	0	No distress
TAMR	10	AAC	198,414	6/1/1991	64	40	54	46	Alligator cracking, L&T Cracking, Patching, Rutting, Raveling & Weathering
TAMR	20	AAC	41,323	1/1/1991	N/A	14	96	4	Alligator cracking, L&T Cracking, Rutting
TAMR	30	AC	50,448	6/1/2004	N/A	100	0	0	No distress
TBMR	10	AC	307,590	6/3/2005	55	96	0	100	L&T Cracking, Patching

Table 2. Pavement evaluation results (continued).

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.
³LCD = last 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.

(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.

⁵Distress due to climate or durability includes those distresses attributed to either the aging of the pavement and the effects of the environment

Maintenance and Rehabilitation Program

A 5-year maintenance and rehabilitation program was developed for Cobb County-McCollum 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 Cobb County-McCollum 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, Cobb County-McCollum 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 Cost ³
A01MR	10	2008	Major M&R	\$116,475
A01MR	30	2008	Preventive Maintenance	\$1,271
A01MR	30	2008	Rejuvenator	\$17,792
A01MR	40	2008	Preventive Maintenance	\$1,731
A01MR	40	2008	Rejuvenator	\$72,496
A01MR	50	2008	Major M&R	\$447,691
A01MR	60	2008	Major M&R	\$148,827
A02MR	10	2008	Preventive Maintenance	\$4,695
A02MR	20	2008	Rejuvenator	\$13,763
A02MR	30	2008	Preventive Maintenance	\$63
A02MR	30	2008	Rejuvenator	\$3,000
A03MR	10	2008	Major M&R	\$132,413
R927MR	10	2008	Major M&R	\$739,289
TAMR	10	2008	Major M&R	\$350,301
TAMR	20	2008	Major M&R	\$211,351
A01MR	30	2012	Preventive Maintenance	\$7,640
A01MR	40	2012	Preventive Maintenance	\$28,987
A02MR	10	2012	Major M&R	\$377,796
A02MR	20	2012	Preventive Maintenance	\$6,883
A02MR	30	2012	Preventive Maintenance	\$474
TBMR	10	2012	Preventive Maintenance	\$4,137

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

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

¹See Figure 5 for the location of the branch.
²Major Rehabilitation: overlay, mill and overlay, reconstruction, 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 Cobb County-McCollum 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 75. A 5- year pavement repair program was generated for the Airport, which revealed that approximately \$2,687,075 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



A01MR-10. Overview.



A01MR-20. Overview.



A01MR-30. Overview.



A01MR-40. Overview.



A01MR-50. Overview.



A01MR-50. Rutting.



A01MR-60. Overview.



A01MR-70. Overview.



A02MR-10. Overview.



A02MR-20. Overview.



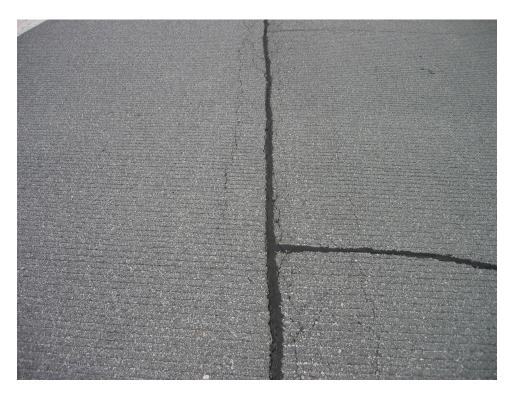
A02MR-30. Overview.



A03MR-10. Overview.



R927MR-10. Overview.



R927MR-10. L&T cracking.



TAMR-10. Overview.



TAMR-10. Alligator cracking.



TAMR-20. Overview.



TAMR-30. Overview.



TBMR-10. Overview.

APPENDIX C INSPECTION REPORT

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD

Branch: A01MR Name: APRON 01 Use: APRON Area: 948,465.00SqFt

Section: 10 of 7 From: ACCESS ROAD To: HANGAR NEAR LG. APRON Last Const.: 6/1/1975

110.00Ft

Surface: AC Family: 2007GAACAPRONNORTH Zone: Category: Rank: P

Area: 22,773.00SqFt Length: 280.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date7/9/2007 Total Samples: 6 Surveyed: 4

Conditions: PCI:28.00 | Inspection Comments:

Sample Number: 01 Type: R Area: 4,000.00SqFt PCI = 16

Sample Comments:

41 ALLIGATOR CRACKING M 3,999.97 Sqft Comments:

Sample Number: 02 Type: R Area: 5,200.00SqFt PCI = 10

Sample Comments:

41 ALLIGATOR CRACKING M 3,499.97 SqFt Comments:

43 BLOCK CRACKING M 1,699.99 SqFt Comments:unsealed,6x6

49 OIL SPILLAGE N 1,099.99 SqFt Comments:

Sample Number: 03 Type: R Area: 6,500.00SqFt PCI = 11

Sample Comments:

41 ALLIGATOR CRACKING M 4,099.97 Sqft Comments: 50 PATCHING L 140.00 Sqft Comments:

49 OIL SPILLAGE N 1,999.98 SqFt Comments:

43 BLOCK CRACKING M 2,399.98 SqFt Comments:unsealed,6x6

Sample Number: 04 Type: R Area: 5,200.00SqFt PCI = 77

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 500.13 Ft Comments:unsealed

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD

Branch: Name: APRON 01 Use: APRON A01MR Area: 948,465.00SqFt

Area:

Section: 20 of From: FRONT OF HANGAR To: 50' FROM HANGAR Last Const.: 6/1/2006

5,000.00SqFt

PCI = 100

Family: 2007GAACAPRONNORTH Zone: Surface: ACCategory: Rank: P Area: 9,818.00SqFt Length: 170.00Ft Width: 57.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date7/9/2007 Total Samples: 3 Surveyed: 3

Conditions: PCI:100.00 |

Inspection Comments:

Type: R

Sample Number: 01 Sample Comments:

<NO DISTRESSES>

Sample Number: 02 Type: R Area: 5,000.00SqFt PCI = 100

Sample Comments:

<NO DISTRESSES>

Sample Number: 03 Type: R Area: 5,000.00SqFt PCI = 100

Sample Comments:

<NO DISTRESSES>

GA2007

Report Generated Date: 1/8/2008

48 LONGITUDINAL/TRANSVERSE CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

Type: R

Sample Number: 16

Sample Comments:

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Use: APRON Branch: A01MR Name: APRON 01 Area: 948,465.00SqFt Section: From: SE CORNER OF LG APRON To: LONG SPUR OFF TW Last Const.: 6/2/1998 30 of Surface: Family: 2007GAACAPRONNORTH Zone: Category: Rank: P ACArea: 118,615.00SqFt Length: 480.00Ft Width: 185.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Last Insp. Date7/9/2007 Total Samples: 41 Surveyed: 6 Conditions: PCI:83.00 | Inspection Comments: Sample Number: 03 PCI = 82Type: R Area: 5,200.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 230.06 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 35.01 Ft Comments: 5,200.00SqFt Sample Number: 05 Type: R Area: PCI = 93Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 86.02 Ft Comments: Sample Number: 07 Type: R Area: 5,200.00SqFt PCI = 91Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 130.03 Ft Comments: PCI = 67Sample Number: 09 Type: R Area: 5,200.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 245.06 Ft Comments: \mathbf{L} 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 45.01 Ft Comments: 41 ALLIGATOR CRACKING Μ 25.00 SqFt Comments: PCI = 82Sample Number: 13 Type: R Area: 5,200.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 230.06 Ft L Comments:

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Area:

30.01 Ft

260.07 Ft

65.02 Ft

5,200.00SqFt

Comments:

Comments:

Comments:

PCI = 80

GA2007

Report Generated Date: 1/8/2008

41 ALLIGATOR CRACKING

Sample Number: 72

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

Type: R

Site Name: Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Use: APRON Branch: A01MR Name: APRON 01 Area: 948,465.00SqFt Section: From: LARGEST APRON AREA To: TAXIWAY A Last Const.: 6/1/1998 40 of Surface: Family: 2007GAAACAPRON3 Zone: Category: Rank: P AAC Area: 483,309.00SqFt Length: 1,515.00Ft Width: 270.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Last Insp. Date7/9/2007 Total Samples: 87 Surveyed: 9 Conditions: PCI:85.00 | Inspection Comments: Sample Number: 05 PCI = 83Type: R Area: 5,700.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 344.09 Ft Comments: Sample Number: 10 Type: R Area: 5,000.00SqFt PCI = 89Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 168.04 Ft L Comments: Sample Number: 23 PCI = 89Type: R Area: 5,000.00SqFt Sample Comments: L 48 LONGITUDINAL/TRANSVERSE CRACKING 45.01 Ft Comments: 52 WEATHERING/RAVELING L 15.00 SqFt Comments: 52 WEATHERING/RAVELING 8.00 SqFt Μ Comments: PCI = 94Sample Number: 27 Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 72.02 Ft Comments: Sample Number: 37 PCI = 74Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 615.16 Ft L Comments: Sample Number: 45 PCI = 95Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 45.01 Ft Comments: PCI = 87Sample Number: 50 Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 220.06 Ft Comments: Sample Number: 68 6,500.00SqFt PCI = 72Type: R Area: Sample Comments:

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Area:

35.00 SqFt

265.07 Ft

165.04 Ft

5,700.00SqFt

Comments:

Comments:

Comments:

PCI = 90

GA2007

Report Generated Date: 1/8/2008

Site Name:

Sample Comments:

50 PATCHING

41 ALLIGATOR CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Use: APRON Branch: A01MR Name: APRON 01 Area: 948,465.00SqFt To: NORTH TOWARD NE-SW RD Section: of From: LG APR. SECT NEAR N-S RD Last Const.: 6/2/1989 50 Surface: Family: 2007GAACAPRONNORTH Zone: Category: Rank: P AC Area: 87,532.00SqFt Length: 420.00Ft Width: 170.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Last Insp. Date7/9/2007 Total Samples: 19 Surveyed: 5 Conditions: PCI:29.00 | Inspection Comments: PCI = 40Sample Number: 01 Type: R Area: 6,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 400.10 Ft Comments:unsealed 52 WEATHERING/RAVELING L 999.99 SqFt Comments: 41 ALLIGATOR CRACKING Μ 360.00 SqFt Comments: Sample Number: 04 Type: R Area: 6,000.00SqFt PCI = 20Sample Comments: 41 ALLIGATOR CRACKING Μ 2,499.98 SqFt Comments: 43 BLOCK CRACKING Μ 3,499.97 SqFt Comments: 9x9, failed seal and Sample Number: 06 Type: R Area: 6,000.00SqFt PCI = 34Sample Comments: 41 ALLIGATOR CRACKING 480.00 SaFt Comments: Μ 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 620.16 Ft Comments:unsealed 48 LONGITUDINAL/TRANSVERSE CRACKING Ь 130.03 Ft Comments:unsealed Sample Number: 08 Area: 6,000.00SqFt PCI = 25Type: R Sample Comments: 41 ALLIGATOR CRACKING 1,199.99 SqFt Comments: Μ 48 LONGITUDINAL/TRANSVERSE CRACKING 600.15 Ft Comments: failed sealant Μ 48 LONGITUDINAL/TRANSVERSE CRACKING Ь 420.11 Ft Comments:unsealed Sample Number: 11 PCI = 20Type: R Area: 3,750.00SqFt

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699.99 SaFt

250.06 Ft

90.02 Ft

16.00 SqFt

Comments:

Comments:

Comments: failed sealant

Comments:unsealed

GA2007

Report Generated Date: 1/8/2008

84,297.00SqFt

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD

Branch: A01MR Name: APRON 01 Use: APRON Area: 948,465.00SqFt

Section: 60 of From: NEAR NW-SE ROAD To: S. ENDS OF T HANGARS Last Const.: 6/2/1989

Surface: Family: 2007GAACAPRONNORTH Zone: Category: Rank: P ACLength: 900.00Ft Width: 40.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Area:

Last Insp. Date7/9/2007 Total Samples: 18 Surveyed: 5

48 LONGITUDINAL/TRANSVERSE CRACKING

Conditions: PCI:56.00 |

Conditions: PCI:56.00 Inspection Comments:					
Sample Number: 03 Type: R Sample Comments:	Area:	4,000.00SqFt		PCI = 60	
41 ALLIGATOR CRACKING	ľ	M 15.00	SqFt	Comments:	
52 WEATHERING/RAVELING	I	L 50.00	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	ľ	M 224.06	Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	I	L 130.03	Ft	Comments:	
Sample Number: 07 Type: R Sample Comments:	Area:	4,000.00SqFt		PCI = 73	
48 LONGITUDINAL/TRANSVERSE CRACKING	I	L 170.04	Ft	Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING	ľ	150.04	Ft	Comments:	
Sample Number: 10 Type: R Sample Comments:	Area:	5,175.00SqFt		PCI = 67	
48 LONGITUDINAL/TRANSVERSE CRACKING	I	L 480.12	Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	ľ	M 200.05	Ft	Comments:	
52 WEATHERING/RAVELING	I	L 500.00	SqFt	Comments:	
Sample Number: 14 Type: R Sample Comments:	Area:	4,550.00SqFt		PCI = 47	
41 ALLIGATOR CRACKING	ľ	M 50.00	SqFt	Comments:	
45 DEPRESSION	I	L 60.00	SqFt	Comments:	
50 PATCHING	ľ	M 250.00	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	I	L 160.04	Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	ľ	4 200.05	Ft	Comments:	
Sample Number: 16 Type: R Sample Comments:	Area:	4,550.00SqFt		PCI = 32	
50 PATCHING	ľ	M 2,799.98	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	ľ	M 95.02	Ft	Comments:	

L

30.01 Ft

Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name:

Site Name:					
Network: ATL-RYY	Name: COBB COUNTY-McCo	OLLUM FIELD			
Branch: A01MR	Name: APRON 01		Use: APRON	Area:	948,465.00SqFt
Section: 70 Surface: AC Area: 142,121.00SqFt Shoulder: Street T Section Comments:	of 7 From: Taxiway A Family: 2007GAACAPRON Length: 485.00Fo Type: Grade: 0.00	NORTH Zon	To: A01MR- e: Category: dth: 230.00Ft	-20 Rank: S	Last Const.: 6/3/2004
Last Insp. Date7/9/2007 Conditions: PCI:100.00 Inspection Comments:	Total Samples: 28 S	urveyed: 6			
Sample Number: 03 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 07 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 12 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 16 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 20 Sample Comments: <no distresses=""></no>	Туре: R	Area:	5,000.00SqFt	PCI = 100	
Sample Number: 28 Sample Comments: <no distresses=""></no>	Туре: R	Area:	5,000.00SqFt	PCI = 100	

GA2007

Report Generated Date: 1/8/2008

Site Name:						
Network: ATL-RYY Name: COBB COUNTY-McCO	OLLUM FIELD)				
Branch: A02MR Name: APRON 02			Use: Al	PRON	Area: 275,0	00.00SqFt
Section: 10 of 3 From: FROM S. I Surface: AC Family: 2007GAACAPRONN Area: 163,250.00SqFt Length: 648.00Ft Shoulder: Street Type: Grade: 0.00 Section Comments:		Zone: Width:	To: 1 Cate; 250.00	gory:	S TO THE SOUTH Rank: S	Last Const.: 6/2/1989
Last Insp. Date7/9/2007 Total Samples: 35 Su Conditions: PCI:67.00 Inspection Comments:	irveyed: 7					
Sample Number: 02 Type: R	Area:	5,000	.00SqFt		PCI = 81	
Sample Comments: 42 BLEEDING		N	20.00	Saft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	60.02		Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	120.03		Comments:s	
48 LONGITUDINAL/TRANSVERSE CRACKING		M	40.01		Comments:	
Sample Number: 05 Type: R	Area:	5,000	000 a Et		PCI = 70	
Sample Number: 03 Type: R Sample Comments:	Alea.	3,000	.00SqFt		r C1 = 70	
43 BLOCK CRACKING	:	M	300.00	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	110.03	Ft	Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	50.01	Ft	Comments:s	
48 LONGITUDINAL/TRANSVERSE CRACKING	:	M	160.04	Ft	Comments:	
Sample Number: 12 Type: R Sample Comments:	Area:	5,000	.00SqFt		PCI = 60	
42 BLEEDING		N	50.00	SqFt	Comments:	
43 BLOCK CRACKING		L	300.00	SqFt	Comments:s,	6 x 6
43 BLOCK CRACKING		L	200.00		Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	370.09		Comments:s	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	180.05		Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING		M	120.03	Ft	Comments:	
Sample Number: 14 Type: R Sample Comments:	Area:	5,000	.00SqFt		PCI = 61	
52 WEATHERING/RAVELING		L	250.00	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	380.10		Comments:s	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	310.08		Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING		M	250.06	Ft	Comments:	
Sample Number: 18 Type: R Sample Comments:	Area:	5,000	.00SqFt		PCI = 52	
52 WEATHERING/RAVELING		L	400.00	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	212.05	Ft	Comments:s	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	160.04		Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING		M	80.02		Comments:	
43 BLOCK CRACKING			,999.98		Comments:s	
43 BLOCK CRACKING		L	400.00		Comments:u	
43 BLOCK CRACKING		M	200.00	Sqr't	Comments:	
Sample Number: 27 Type: R Sample Comments:	Area:	5,000	.00SqFt		PCI = 69	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	550.14	Ft	Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	75.02	Ft	Comments:s	

GA2007

Report Generated Date: 1/8/2008

Site Name:

48 LONGITUDINAL/TRANSVERSE CRACKING	M 30.01 Ft		Comments:
Sample Number: 31 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 78
48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	L L	210.05 Ft 250.06 Ft	Comments:u Comments:s

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD

Use: APRON Branch: A02MR Name: APRON 02 Area: 275,000.00SqFt

Section: 3 From: A02MR-10 To: WEST Last Const.: 6/1/1999 20 of

250.00Ft

Zone: Surface: Family: 2007GAAACAPRON3 Category: Rank: P AAC Width:

Area: 91,750.00SqFt Length: 362.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments: WAS PART OF A02-10 PRIOR TO 1999

Last Insp. Date7/9/2007 Total Samples: 20 Surveyed: 5

Conditions: PCI:85.00 | Inspection Comments:

Sample Number: 02 Type: R PCI = 86Area: 4,000.00SqFt

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 184.05 Ft Comments:u

Sample Number: 06 Type: R Area: 5,000.00SqFt PCI = 80

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 345.09 Ft L Comments:u

50 PATCHING L 3.00 SqFt Comments:

Sample Number: 10 Type: R Area: 4,000.00SqFt PCI = 87

Sample Comments:

42 BLEEDING 2.00 SqFt Ν Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 170.04 Ft L Comments:u

Sample Number: 12 PCI = 82Type: R Area: 6,000.00SqFt

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 406.10 Ft Comments:u

PCI = 92Sample Number: 14 Type: R 5,000.00SqFt Area:

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 110.03 Ft Comments:u L

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD

Branch: A02MR Name: APRON 02 Use: APRON Area: 275,000.00SqFt

Section: 30 of 3 From: A03MR-10 To: A02MR-10 Last Const.: 6/1/1999

200.00Ft

Surface: AAC Family: 2007GAAACAPRON3 Zone: Category: Rank: P

Area: 20,000.00SqFt Length: 100.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments: NEW APRON

Last Insp. Date7/9/2007 Total Samples: 4 Surveyed: 3

Conditions: PCI:88.00 | Inspection Comments:

Sample Number: 01 Type: R Area: 7,000.00SqFt PCI = 96

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 40.01 Ft Comments:

Sample Number: 02 Type: R Area: 6,650.00SqFt PCI = 81Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48.01 Ft Comments: Μ 48 LONGITUDINAL/TRANSVERSE CRACKING L 50.01 Ft Comments: 53 RUTTING L 5.00 SqFt Comments:

Sample Number: 03 Type: R Area: 6,650.00SqFt PCI = 87

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 180.05 Ft Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING M 5.00 Ft Comments: veg

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD

Branch: A03MR Name: APRON 03 Use: APRON Area: 75,000.00SqFt

Section: 10 of 1 From: SW CORNER OF TW B To: SW NEAR ROADS Last Const.: 6/2/1981

Surface: AC Family: 2007GAACAPRONNORTH Zone: Category: Rank: S Area: 75,000.00SqFt Length: 300.00Ft Width: 250.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date7/9/2007 Total Samples: 15 Surveyed: 5

Conditions: PCI:49.00 | Inspection Comments:

Inspection Comments:				
Sample Number: 02 Type: R	Area:	5,000.00SqFt	PCI = 52	
Sample Comments:	-	120 02 11		
48 LONGITUDINAL/TRANSVERSE CRACKING	L	130.03 Ft	Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	200.05 Ft	Comments:s	
48 LONGITUDINAL/TRANSVERSE CRACKING	М	200.05 Ft	Comments:	
41 ALLIGATOR CRACKING	М	100.00 SqFt	Comments:	
Sample Number: 04 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 62	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	400.10 Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	150.04 Ft	Comments:u	
Sample Number: 08 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 46	
41 ALLIGATOR CRACKING	М	15.00 SqFt	Comments:	
52 WEATHERING/RAVELING	L	300.00 SqFt		
48 LONGITUDINAL/TRANSVERSE CRACKING	L	270.07 Ft	Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	430.11 Ft	Comments:	
50 PATCHING	L	192.00 SqFt		
Sample Number: 12 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 41	
50 PATCHING	L	375.00 SqFt	Comments:	
52 WEATHERING/RAVELING	L	500.00 SqFt		
52 WEATHERING/RAVELING	M	120.00 SqFt	Comments:	
41 ALLIGATOR CRACKING	M	55.00 SqFt		
48 LONGITUDINAL/TRANSVERSE CRACKING	L	210.05 Ft	Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	420.11 Ft	Comments:	
Sample Number: 14 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 43	
50 PATCHING	L	624.99 SqFt	Comments:	
52 WEATHERING/RAVELING	L	600.00 SqFt		
		_		
52 WEATHERING/RAVELING	M	25.00 SqFt		
41 ALLIGATOR CRACKING	M	25.00 SqFt		
48 LONGITUDINAL/TRANSVERSE CRACKING	L	150.04 Ft	Comments:u	
48 LONGITUDINAL/TRANSVERSE CRACKING	M	380.10 Ft	Comments:	

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Name: RUNUP APRON Use: APRON Branch: ARUNUPMR Area: 25,390.00SqFt Section: 10 of From: TAMR-10 To: SEE MAP Last Const.: 6/1/2005 Rank: P Family: 2007GAACAPRONNORTH Zone: Surface: AC Category: Area: 25,390.00SqFt Length: 250.00Ft Width: 100.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Last Insp. Date7/9/2007 Total Samples: 5 Surveyed: 4 Conditions: PCI:100.00 | Inspection Comments: Sample Number: 01 Type: R Area: 5,000.00SqFt PCI = 100

Sample Comments:

<NO DISTRESSES>

Sample Number: 02

Sample Comments:
<NO DISTRESSES>

<NO DISTRESSES>

Sample Number: 03
Sample Comments:

<NO DISTRESSES>

Sample Number: 04 Sample Comments:

<NO DISTRESSES>

Type: R

Type: R

Type: R

Area:

Area:

Area:

5,000.00SqFt

5,000.00SqFt

5,000.00SqFt

PCI = 100

PCI = 100

PCI = 100

GA2007

Report Generated Date: 1/8/2008

48 LONGITUDINAL/TRANSVERSE CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

Site Name: Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Use: RUNWAY Branch: **R927MR** Name: RUNWAY 9/27 Area: 490,333.00SqFt 2 From: 9 END To: R927MR-20 Section: 10 of Last Const.: 6/1/1991 Family: Zone: Rank: P Surface: AAC Category: 418,741.00SqFt Length: Width: 75.00Ft Area: 5,355.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Total Samples: 72 Surveyed: 8 Last Insp. Date7/9/2007 Conditions: PCI:69.00 | Inspection Comments: PCI = 73Sample Number: 05 Type: R Area: 5,625.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 182.05 Ft \mathbf{L} Comments:u 42 BLEEDING Ν 2.00 SaFt Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 308.08 Ft Comments:s Ь 48 LONGITUDINAL/TRANSVERSE CRACKING 200.05 Ft M Comments: Sample Number: 14 PCI = 71Type: R Area: 5,625.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 42.01 Ft Comments:u 48 LONGITUDINAL/TRANSVERSE CRACKING L 153.04 Ft Comments:s 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 250.06 Ft Comments: Sample Number: 23 PCI = 61Type: R Area: 5,625.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 81.02 Ft Comments:u 350.00 SqFt 50 PATCHING L Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 100.03 Ft \mathbf{L} Comments:s 48 LONGITUDINAL/TRANSVERSE CRACKING 348.09 Ft Μ Comments: Sample Number: 32 Type: R Area: 5,625.00SqFt PCI = 64Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 124.03 Ft Τ, Comments:u 48 LONGITUDINAL/TRANSVERSE CRACKING 255.07 Ft \mathbf{L} Comments:s 48 LONGITUDINAL/TRANSVERSE CRACKING 400.10 Ft M Comments: Sample Number: 41 PCI = 67Type: R Area: 5,625.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING \mathbf{L} 81.02 Ft Comments:u 91.00 SqFt 50 PATCHING L Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING \mathbf{L} 300.08 Ft Comments:s 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 231.06 Ft Comments: Sample Number: 50 5,625.00SqFt PCI = 78Type: R Area: Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING $_{\rm L}$ 42.01 Ft Comments:u 48 LONGITUDINAL/TRANSVERSE CRACKING \mathbf{L} 200.05 Ft Comments:s 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 127.03 Ft Comments: Sample Number: 59 5,625.00SqFt PCI = 68Type: R Area: Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 255.07 Ft Comments:s

Μ

130.03 Ft

171.04 Ft

Comments:

Comments:u

GA2007

Report Generated Date: 1/8/2008

Site Name:

Sample Number: 68	Туре: R	Area:	5,625.00SqFt		PCI = 70
Sample Comments:					
50 PATCHING		L	1,124.99	SqFt	Comments:
48 LONGITUDINAL/	TRANSVERSE CRACKING	L	114.03	Ft	Comments:s
48 LONGITUDINAL/	TRANSVERSE CRACKING	M	100.03	Ft	Comments:
48 LONGITUDINAL/	TRANSVERSE CRACKING	L	146.08	Ft	Comments:u

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY	Name: COBB COUNTY-McCOLI	UM FIELD				
Branch: R927MR	Name: RUNWAY 9/27		U	se: RUNWAY	Area:	490,333.00SqFt
Section: 20 Surface: AC Area: 71,592.00SqFt Shoulder: Street T Section Comments:	of 2 From: R927MR-10 Family: 2007GAACRWYGA70 Length: 950.00Ft Type: Grade: 0.00		one: Width:	To: Runway 2' Category: 75.00Ft	7 End Rank: P	Last Const.: 6/1/2004
Last Insp. Date7/9/2007 Conditions: PCI:100.00 Inspection Comments:	Total Samples: 13 Surv	reyed: 5				
Sample Number: 02 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,625.00Sql	Ft	PCI = 100	
Sample Number: 05 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,625.00Sql	Ft	PCI = 100	
Sample Number: 07 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,625.00Sql	Ft	PCI = 100	
Sample Number: 09 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,625.00Sql	Ft	PCI = 100	
Sample Number: 11 Sample Comments: <no distresses=""></no>	Type: R	Area:	5,625.00Sql	Ft	PCI = 100	

GA2007

Report Generated Date: 1/8/2008

Sample Comments:

41 ALLIGATOR CRACKING

Site Name: Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Use: TAXIWAY Branch: **TAMR** Name: TAXIWAY A Area: 290,185.00SqFt From: N OF RUNWAY To: APRON 1 AREA Last Const.: 6/1/1991 Section: 10 of 3 Family: 2007GAAACTWYGANORTH Category: Surface: AAC Zone: Rank: P Length: 5,710.00Ft Width: 40.00Ft Area: 198,414.00SqFt Lanes: 0 Shoulder: Street Type: Grade: 0.00 Section Comments: Total Samples: 42 Surveyed: 7 Last Insp. Date7/9/2007 Conditions: PCI:40.00 | Inspection Comments: Sample Number: 02 PCI = 48Type: R Area: 5,000.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 239.06 Ft Comments: Μ 48 LONGITUDINAL/TRANSVERSE CRACKING 297.08 Ft L Comments:u 41 ALLIGATOR CRACKING Μ 120.00 SqFt Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Comments: Τ, 60.02 Ft Sample Number: 07 PCI = 31Type: R Area: 5,000.00SqFt Sample Comments: 41 ALLIGATOR CRACKING 550.00 SqFt Μ Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 230.06 Ft Comments:u 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 523.13 Ft Comments: Sample Number: 16 PCI = 64Type: R Area: 5,450.00SqFt Sample Comments: 250.00 SqFt 50 PATCHING L Comments: 52 WEATHERING/RAVELING 200.00 SqFt Τ, Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 50.01 Ft L Comments:s 48 LONGITUDINAL/TRANSVERSE CRACKING 411.11 Ft Comments:u L 48 LONGITUDINAL/TRANSVERSE CRACKING 100.03 Ft M Comments: Sample Number: 22 Type: R Area: 5,000.00SqFt PCI = 23Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 427.11 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 300.08 Ft Comments:u 41 ALLIGATOR CRACKING Μ 749.99 SqFt Comments: 53 RUTTING L 250.00 SqFt Comments: Sample Number: 29 Type: R 5,000.00SqFt PCI = 24Area: Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Η 5.00 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 437.11 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 271.07 Ft \mathbf{L} Comments:u 41 ALLIGATOR CRACKING M 500.00 SqFt Comments: 53 RUTTING 250.00 SqFt Comments: Ь Sample Number: 32 Type: R Area: 4,610.00SqFt PCI = 66Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 285.07 Ft Comments: Μ 48 LONGITUDINAL/TRANSVERSE CRACKING 190.05 Ft L Comments:u Sample Number: 39 Area: 5,000.00SqFt PCI = 23Type: R

649.99 SqFt

Comments:

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GA2007

Report Generated Date: 1/8/2008

Site Name:

48	LONGITUDINAL/TRANSVERSE C	CRACKING	L	262.07	Ft	Comments:
48	LONGITUDINAL/TRANSVERSE C	RACKING	M	527.13	Ft	Comments:
53	RUTTING		L	350.00	SqFt	Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name:

Sample Number: 07

41 ALLIGATOR CRACKING

Sample Comments:

53 RUTTING

Type: R

48 LONGITUDINAL/TRANSVERSE CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Use: TAXIWAY Branch: **TAMR** Name: TAXIWAY A Area: 290,185.00SqFt Section: of 3 From: TAMR-10 To: TAMR-30 Last Const.: 1/1/1991 20 Surface: Family: 2007GAAACTWYGANORTH Zone: Category: Rank: P AAC Area: 41,323.00SqFt Length: 1,005.00Ft Width: 40.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Last Insp. Date7/9/2007 Total Samples: 9 Surveyed: 4 Conditions: PCI:14.00 | Inspection Comments: Sample Number: 04 Type: R PCI = 12Area: 5,000.00SqFt Sample Comments: 41 ALLIGATOR CRACKING Μ 1,874.98 SaFt Comments: 53 RUTTING Μ 1,874.96 SqFt Comments: Sample Number: 05 Type: R Area: 5,000.00SqFt PCI = 12Sample Comments: 41 ALLIGATOR CRACKING 1,874.98 SqFt Μ Comments: 53 RUTTING Μ 1,874.96 SqFt Comments: Sample Number: 06 Type: R PCI = 12Area: 5,000.00SqFt Sample Comments: 1,874.98 SqFt 41 ALLIGATOR CRACKING Μ Comments: 53 RUTTING Μ 1,874.96 SqFt Comments:

5,000.00SqFt

1,599.99 SqFt

1,599.99 SqFt

35.02 Ft

20.01 Ft

Area:

Μ

L

L

PCI = 18

Comments:

Comments:

Comments:

Comments:

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY	Name: COBB COUNTY-McCOL	LUM FIELD			
Branch: TAMR	Name: TAXIWAY A		Use: TAXIWAY	Area:	290,185.00SqFt
Section: 30 Surface: AC Area: 50,448.00SqFt Shoulder: Street T Section Comments:	of 3 From: TAMR-20 Family: 2007GAACTWYGA Length: 1,390.00Ft Type: Grade: 0.00	Zone: Widt Lanes: 0		27 End Rank: P	Last Const.: 6/1/2004
Last Insp. Date7/9/2007 Conditions: PCI:100.00 Inspection Comments:	Total Samples: 16 Sur	veyed: 5			
Sample Number: 03 Sample Comments: <no distresses=""></no>	Туре: R	Area: 5	5,000.00SqFt	PCI = 100	
Sample Number: 05 Sample Comments: <no distresses=""></no>	Type: R	Area: 5	5,000.00SqFt	PCI = 100	
Sample Number: 07 Sample Comments: <no distresses=""></no>	Туре: R	Area: 5	5,000.00SqFt	PCI = 100	
Sample Number: 09 Sample Comments: <no distresses=""></no>	Туре: R	Area: 5	5,000.00SqFt	PCI = 100	
Sample Number: 13 Sample Comments: <no distresses=""></no>	Туре: R	Area: 5	5,000.00SqFt	PCI = 100	

GA2007

Report Generated Date: 1/8/2008

Site Name:

Network: ATL-RYY Name: COBB COUNTY-McCOLLUM FIELD Branch: **TBMR** Name: TAXIWAY B Use: TAXIWAY Area: 307,590.00SqFt Section: From: Apron 03 To: Runway 27 End Last Const.: 6/3/2005 10 of Surface: Family: 2007GAACTWYGA Zone: Category: Rank: S ACArea: 307,590.00SqFt Length: 7,680.00Ft Width: 40.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments: Last Insp. Date7/9/2007 Total Samples: 63 Surveyed: 8 Conditions: PCI:96.00 | Inspection Comments: Sample Number: 02 Type: R PCI = 100Area: 5,000.00SqFt Sample Comments: <NO DISTRESSES>

PCI = 100

Sample Number: 08 Type: R Area: 5,000.00SqFt
Sample Comments:
<NO DISTRESSES>

Sample Number: 12 Type: R Area: 5,000.00SqFt PCI = 100

Sample Comments: <NO DISTRESSES>

Sample Number: 18 Type: R Area: 5,000.00SqFt PCI = 93
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 83.02 Ft Comments:u

Sample Number: 23 Type: R Area: 5,000.00SqFt PCI = 96

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 29.01 Ft Comments:u

Sample Number: 34 Type: R Area: 5,000.00SqFt PCI = 88

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 185.05 Ft Comments:u

Sample Number: 43 Type: R Area: 5,000.00SqFt PCI = 89
Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 66.02 Ft Comments:u 50 PATCHING L 120.00 SqFt Comments:

Sample Number: 56 Type: R Area: 5,000.00SqFt PCI = 100

Sample Comments:

<NO DISTRESSES>

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
Siloving	High	Patch
Slippage Cracking	N/A	Patch
Shippage Clacking	Low	Monitor
Swelling	Medium	Patch
Swelling		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
A01MR	30	Alligator cracking	Medium	Patching - AC Deep	138	SqFt	\$3.15	\$436
A01MR	30	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	666	Ft	\$1.13	\$752
A01MR	40	Weathering and raveling	Medium	Patching - AC Deep	81	SqFt	\$3.15	\$254
A01MR	40	Alligator cracking	Medium	Patching - AC Deep	433	SqFt	\$3.15	\$1,363
A02MR	10	Block cracking	Medium	Crack Sealing - AC	711	Ft	\$1.13	\$803
A02MR	10	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	3,173	Ft	\$1.13	\$3,585
A02MR	30	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	52	Ft	\$1.13	\$59

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
A01MR	30	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	666	Ft	\$1.13	\$752
A02MR	10	Block cracking	Medium	Crack Sealing - AC	711	Ft	\$1.13	\$803
A02MR	10	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	3,173	Ft	\$1.13	\$3,585
A02MR	30	Longitudinal and transverse cracking	Medium	Crack Sealing - AC	52	Ft	\$1.13	\$59
A01MR	30	Alligator cracking	Medium	Patching - AC Deep	138	SqFt	\$3.15	\$436
A01MR	40	Weathering and raveling	Medium	Patching - AC Deep	81	SqFt	\$3.15	\$254
A01MR	40	Alligator cracking	Medium	Patching - AC Deep	433	SqFt	\$3.15	\$1,363

APPENDIX G

FAA AC 150/5380-6B



For more information contact:

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(404)651-9201 www.dot.state.ga.us

Prepared by:





