Iowa City Municipal Airport

PAVEMENT MANAGEMENT REPORT

PREPARED BY

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JULY 2022

applied pavement TECHNOLOGY

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IOWA CITY MUNICIPAL AIRPORT
PAVEMENT MANAGEMENT REPORT

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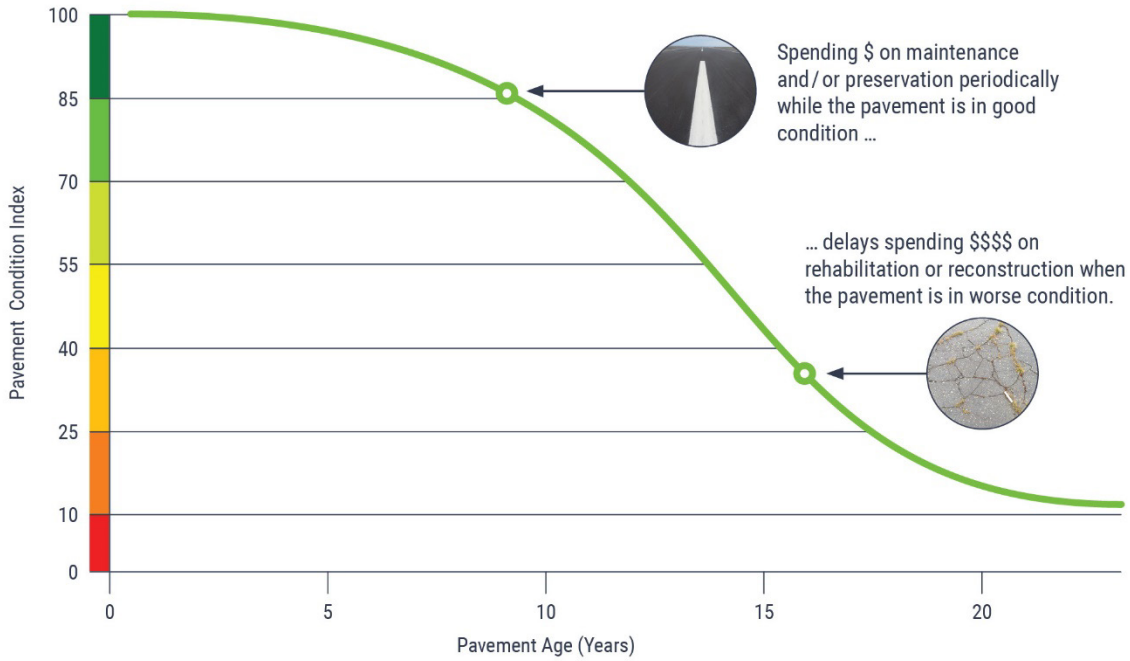
INTRODUCTION

Applied Pavement Technology, Inc. (APTech), with assistance from Robinson Engineering Company, updated the Airport Pavement Management System (APMS) for the Iowa Department of Transportation, Modal Transportation Bureau – Aviation (Iowa DOT). The APMS provides a means to monitor the condition of the pavements within the state of Iowa and to proactively plan for their preservation.

As part of this project, pavement conditions at Iowa City Municipal Airport were assessed in November 2021 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 provides an overall measure of condition and an indication of the level of work that will be required to maintain or repair a pavement. The distress information also provides insight into what is causing the pavement to deteriorate, which is the first step in selecting the appropriate repair action to correct the problem.

Programmed into an APMS, PCI information is used to determine when preventive maintenance actions (such as crack or joint sealing) are advisable and to identify the most cost-effective time to perform major rehabilitation (such as an overlay or whitetopping). Delaying maintenance and rehabilitation (M&R) until a pavement structure has seriously degraded can cost many times more than if M&R was applied earlier in a pavement's life cycle, as shown in Figure 1. From a safety perspective, pavement distresses, such as cracks and loose debris, may pose risks in terms of the potential for aircraft tire damage and the ability of a pilot to safely control aircraft.

Figure 1. Pavement condition versus cost of repair.



The pavement evaluation results for Iowa City Municipal Airport are presented within this report and can be used by Iowa City Municipal Airport, the Iowa DOT, and the Federal Aviation Administration (FAA) to identify, prioritize, and schedule pavement M&R actions at the airport. In addition to this report, the interactive pavement management data visualization tool IDEA, containing the pavement management information collected during this project, was updated and may be accessed from the Iowa DOT's website (https://iowadot.gov/aviation).

PAVEMENT INVENTORY

The project began with a review of the existing inventory information pertaining to the pavements at Iowa City Municipal Airport. The date of original construction, along with the date of any subsequent rehabilitation; the location of completed work; and the type of work undertaken were gathered. The information was used to update the pavement management database and associated maps as necessary to account for pavement-related work that had been undertaken since the last time the airport was evaluated in 2018.

The pavement network at Iowa City Municipal Airport was then divided into 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, aprons, and T-hangars are also separate branches.

Each branch was further divided into sections. Traditionally, sections are defined as parts of the branch that share common attributes, such as cross-section, date of last construction, traffic level, and performance. Using this approach, if a runway was built in 1968 and then extended in 1984, it would contain two separate sections.

To estimate the overall condition of a pavement section, each section was subdivided into sample units. Portions of these sample units were evaluated during the pavement inspection, and the collected information was extrapolated to predict the overall section condition and quantities of distress.

Approximately 1,396,200 square feet of pavement were evaluated at Iowa City Municipal Airport, as illustrated in Figure 2. This figure also shows the area-weighted age, in years, of the pavements at the time of the inspection. Figure 3 provides a map that details how the pavement network was divided into management units and identifies the sample units that were evaluated during the pavement inspection at Iowa City Municipal Airport.

Figure 2. Pavement area by branch use at Iowa City Municipal Airport.

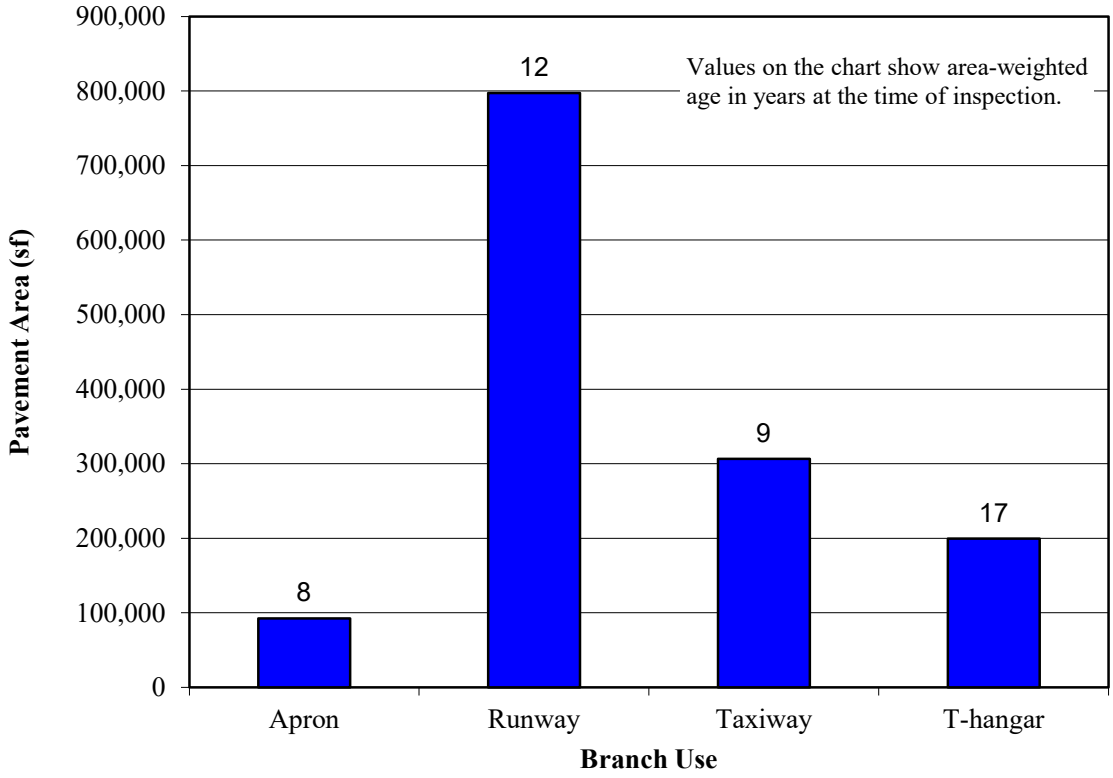
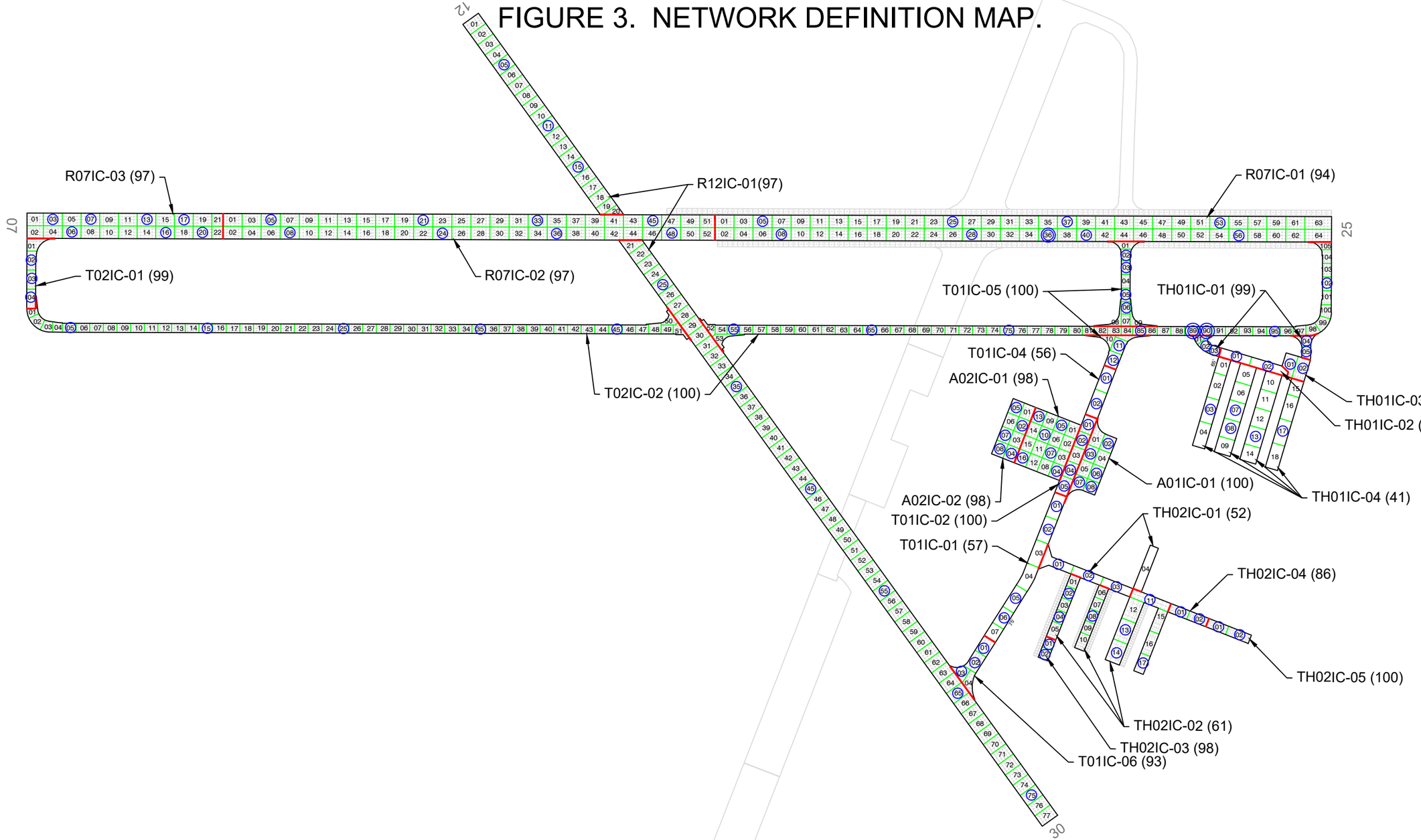


FIGURE 3. NETWORK DEFINITION MAP.



NETWORK DEFINITION LEGEND

R18AL-01 (71)

- BRANCH IDENTIFIER
- SECTION IDENTIFIER
- PCI VALUE
- SECTION BREAK LINE
- SAMPLE UNIT BREAK LINE
- SLAB JOINT
- 03 — SAMPLE UNIT NUMBER
- (03) — SAMPLE UNIT INSPECTED
- ((03)) — ADDITIONAL SAMPLE UNIT

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AGENCY:	Iowa Department of Transportation Modal Transportation Bureau - Aviation
LOCATION:	Iowa City Municipal Airport Iowa City, Iowa
PAGE TITLE:	Network Definition Map

PROJECT DATE:	CREATION DATE:	PROJECT MANAGER:	JOB NUMBER:
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FILENAME:		LAYOUT NAME/NUMBER:	PAGE NUMBER:
Iowa City.dwg		NET. DEF.	5

PAVEMENT EVALUATION

Pavement Evaluation Procedure

APTech inspected the pavements at Iowa City Municipal Airport using the PCI procedure described in:

- FAA Advisory Circular 150/5380-6C, *Guidelines and Procedures for Maintenance of Airport Pavements* (https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5380-6C.pdf).
- FAA Advisory Circular 150/5380-7B, *Airport Pavement Management Program (PMP)* (https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5380-7B.pdf).
- ASTM D5340-20, *Standard Test Method for Airport Pavement Condition Index Surveys*.

The PCI provides a numerical indication of overall pavement condition, as illustrated in Figure 4. The types and amounts of deterioration are used to calculate the PCI of the section. The PCI ranges from a value of 0, which represents a pavement in a failed condition, to a value of 100, which represents a pavement in excellent condition. It is important to note that factors other than overall PCI need to be considered when identifying the appropriate type of repair, including types of distress present and rate of deterioration. Also, since the PCI does not assess the structural integrity or capacity of the pavement structure, further testing may be needed to validate and refine the treatment strategy.

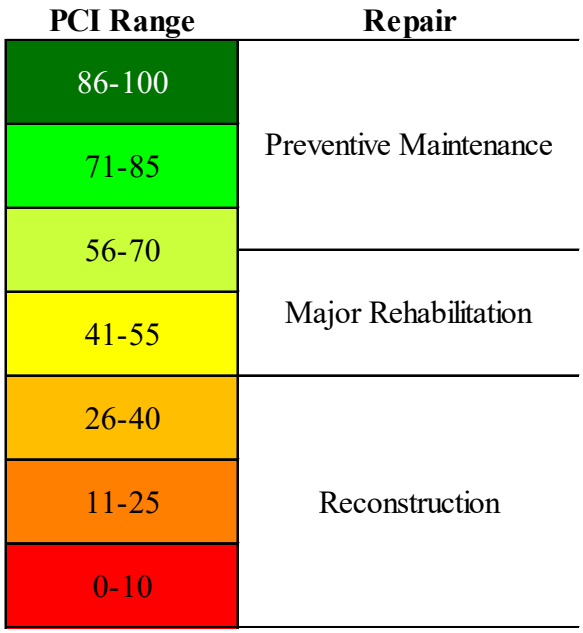
Figure 4. Visual representation of PCI scale on typical pavement surfaces[1].

PCI = 100 PCI = 60 PCI = 35

[1]Photographs shown are not specific to Iowa City Municipal Airport.

Generally, pavements with relatively high PCIs that are not exhibiting significant load-related distress will benefit from preventive maintenance actions, such as crack sealing or joint resealing. As the PCI drops, the pavements may require major rehabilitation, such as an overlay or whitetopping. In some situations where the PCI has dropped low enough, reconstruction may be the only viable alternative due to the substantial damage to the pavement structure. Figure 5 illustrates how the appropriate repair type varies with the PCI of a pavement section and provides the corresponding colors used for the maps and charts in this report for each range of PCIs.

Figure 5. PCI versus repair type.



The types of distress identified during the PCI inspection provide insight into the cause of pavement deterioration, which in turn helps in selecting a rehabilitation alternative that corrects the cause, thus eliminating or delaying its recurrence. PCI distress types are characterized as load-related (such as alligator cracking on asphalt-surfaced pavements or shattered slabs on portland cement concrete [PCC] pavements), climate/durability-related (such as weathering [a climate-related distress type on asphalt-surfaced pavements] and durability cracking [a durability-related distress type on PCC pavements]), and other (distress types that cannot be attributed solely to load or climate/durability).

Appendix A identifies the distress types considered during a PCI inspection and describes the likely cause of each distress type. It should be noted that a PCI is based on visual signs of pavement deterioration and does not provide a measure of structural capacity.

Pavement Evaluation Results

The pavements at Iowa City Municipal Airport were inspected in November 2021. The 2021 area-weighted condition of Iowa City Municipal Airport is 90, with conditions ranging from 22 to 100 (on a scale of 0 [failed] to 100 [excellent]). During the previous pavement inspection in 2018, the area-weighted PCI of the airport was 90.

Figure 6 summarizes the overall condition of the pavements at Iowa City Municipal Airport, and Figure 7 presents area-weighted condition (average PCI adjusted to account for the relative size of the pavement sections) by branch use. Figure 8 is a map that displays the condition of the evaluated pavements. Table 1 summarizes the results of the pavement evaluation. Appendix B presents photographs taken during the PCI inspection, and Appendix C contains detailed information on the distress types observed during the visual survey. Appendix D includes detailed work history information that was collected during the record review process.

Figure 6. Pavement area by PCI range at Iowa City Municipal Airport.

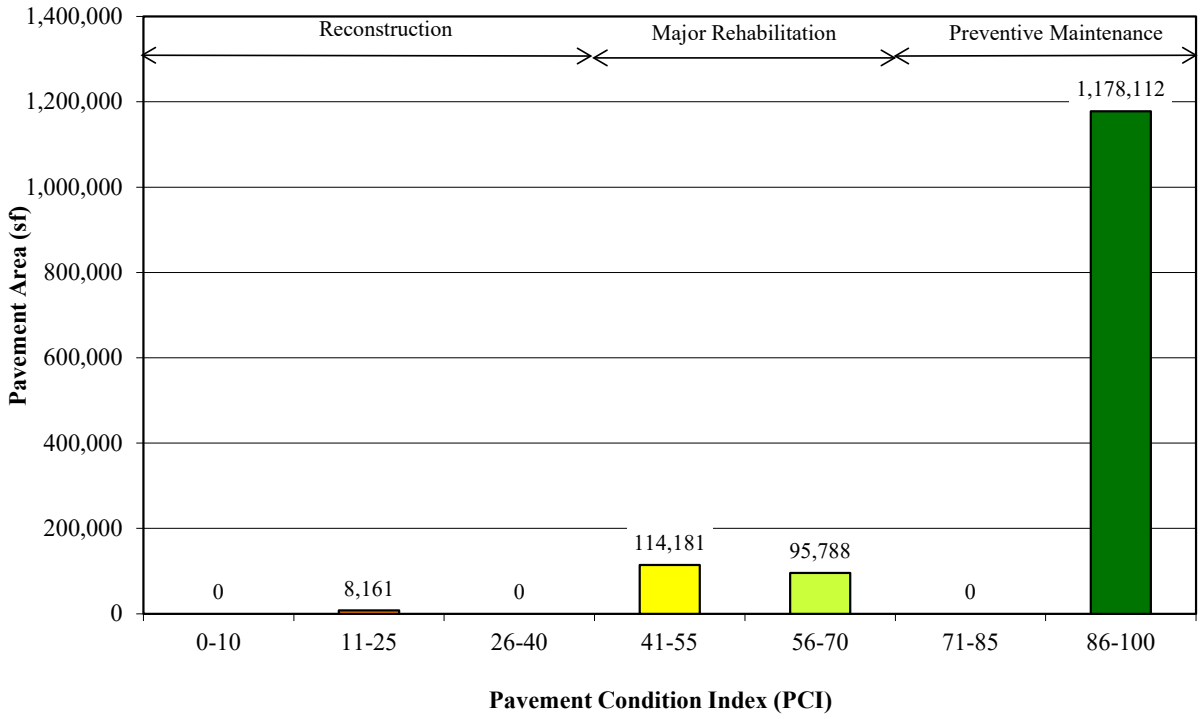


Figure 7. Area-weighted PCI by branch use at Iowa City Municipal Airport.
(Values on chart are area-weighted)

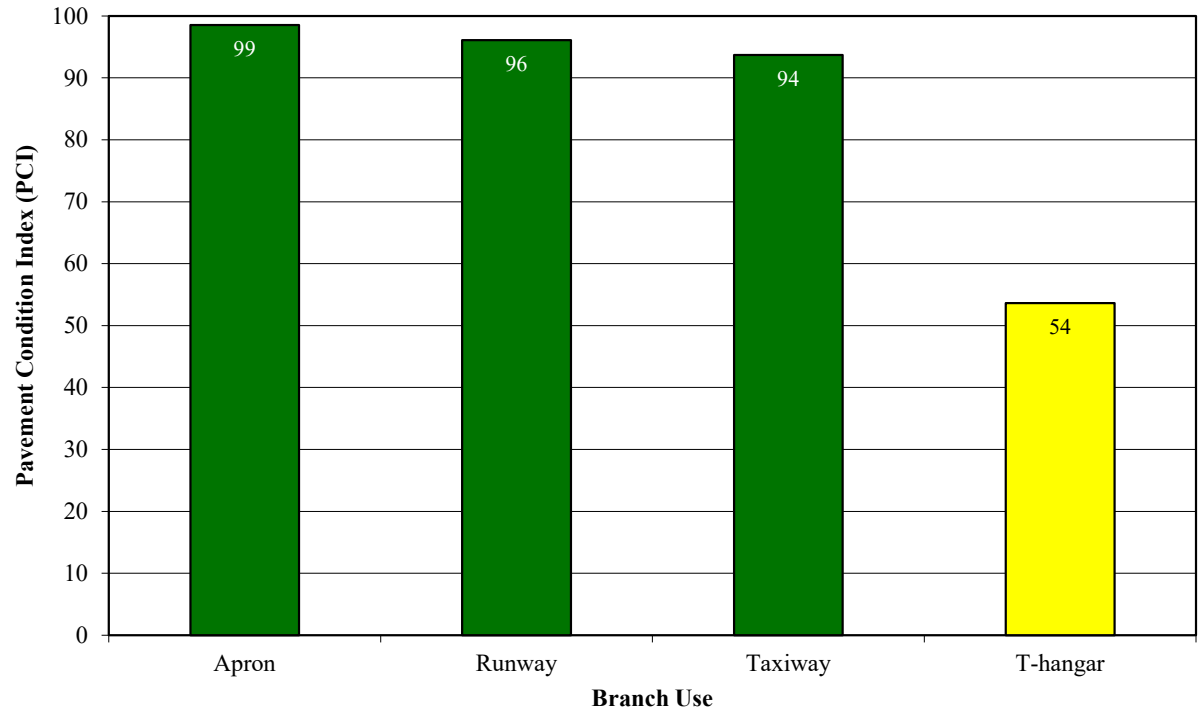
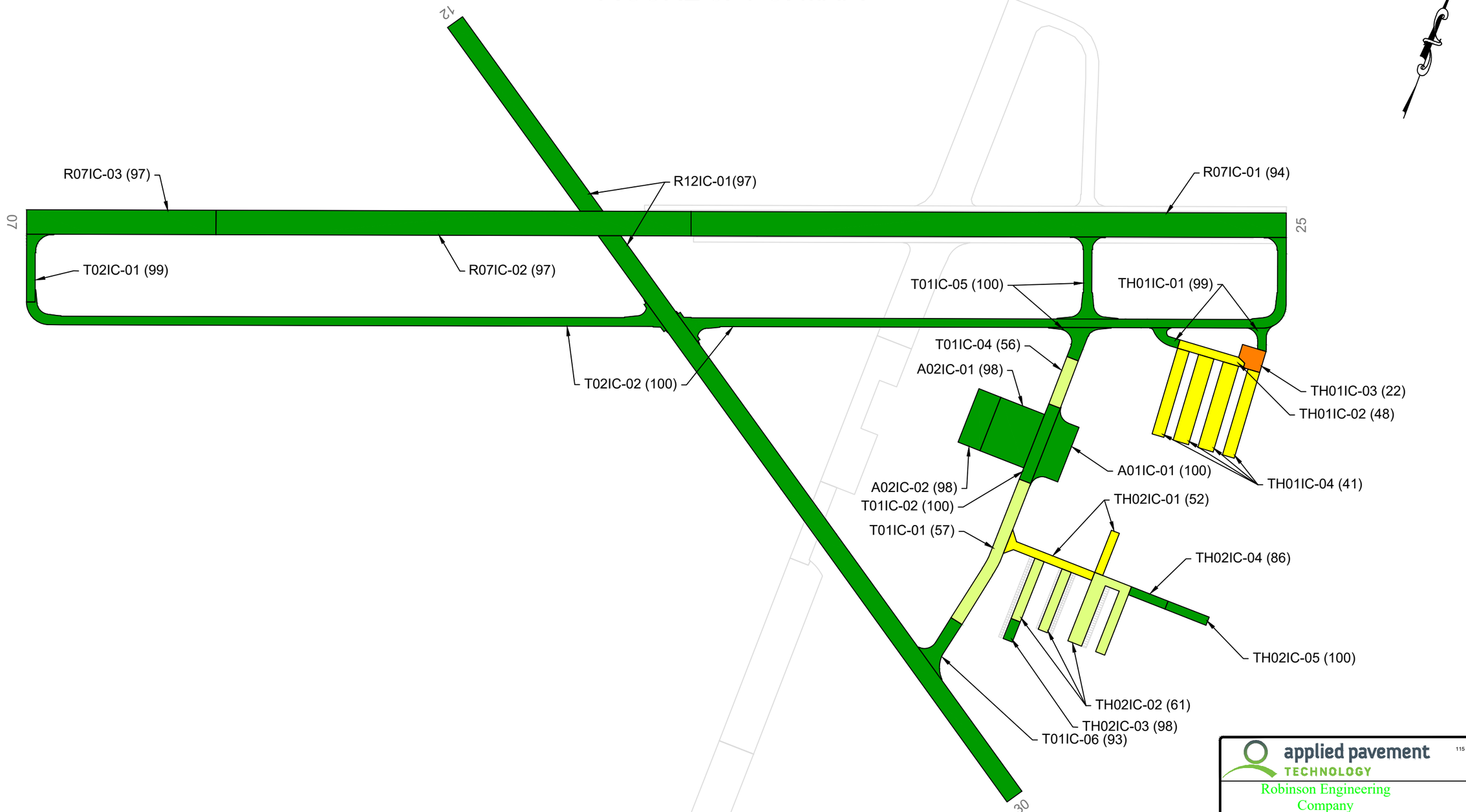


FIGURE 8. PCI MAP.



LEGEND

BRANCH IDENTIFIER
SECTION IDENTIFIER
PCI VALUE
RW927GL-10 (74)
SECTION BREAK LINE

PAVEMENT CONDITION INDEX

PCI

86-100
71-85
56-70
41-55
26-40
11-25
0-10

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AGENCY:	Iowa Department of Transportation Modal Transportation Bureau - Aviation
LOCATION:	Iowa City Municipal Airport Iowa City, Iowa
PAGE TITLE:	2021 Pavement Condition Index Map

PROJECT DATE:	CREATION DATE:	PROJECT MANAGER:	JOB NUMBER:
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FILENAME:		LAYOUT NAME/NUMBER:	PAGE NUMBER:
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Table 1. 2021 pavement evaluation results.

Branch	Section	Surface Type	Section Area (sf)	LCD	2021 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
A01IC	01	PCC	25,168	6/2/2020	100	0	0	0	Small Patch
A02IC	01	PCC	44,939	6/1/2007	98	0	100	0	Joint Seal Damage
A02IC	02	PCC	22,470	7/1/2016	98	0	100	0	Joint Seal Damage
R07IC	01	PCC	243,002	4/3/2009	94	29	59	12	Faulting, Joint Seal Damage, LTD Cracking, Small Patch
R07IC	02	PCC	193,887	10/3/2009	97	0	97	3	Joint Seal Damage, Small Patch
R07IC	03	PCC	77,286	10/2/2008	97	11	89	0	Joint Seal Damage, LTD Cracking
R12IC	01	PCC	283,221	10/3/2009	97	0	89	11	Joint Spalling, Joint Seal Damage, Shrinkage Cracking
T01IC	01	APC	32,101	6/1/2013	57	0	100	0	Joint Reflection Cracking, L&T Cracking, Raveling, Weathering
T01IC	02	PCC	16,542	6/2/2020	100	0	0	0	No Distresses
T01IC	04	APC	10,326	6/1/2013	56	0	100	0	Joint Reflection Cracking, L&T Cracking, Patching, Weathering
T01IC	05	PCC	26,020	6/3/2012	100	0	100	0	Joint Seal Damage
T01IC	06	PCC	12,680	10/15/2009	93	0	22	78	ASR, Corner Spalling, Joint Seal Damage
T02IC	01	PCC	10,933	10/15/2008	99	0	100	0	Joint Seal Damage
T02IC	02	PCC	197,985	6/3/2012	100	94	0	6	LTD Cracking, Small Patch
TH01IC	01	PCC	8,500	6/3/2012	99	0	89	11	Joint Seal Damage, Small Patch
TH01IC	02	APC	9,559	7/1/2009	48	25	75	0	Alligator Cracking, Depression, Joint Reflection Cracking, L&T Cracking, Raveling, Weathering
TH01IC	03	PCC	8,161	1/1/1945	22	82	8	10	Corner Break, Corner Spalling, Joint Seal Damage, LTD Cracking, Scaling, Shattered Slab

Table 1. 2021 pavement evaluation results (continued).

Branch	Section	Surface Type	Section Area (sf)	LCD	2021 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
TH01IC	04	AAC	83,972	7/1/2009	41	53	47	0	Alligator Cracking, L&T Cracking, Patching, Raveling, Rutting, Weathering
TH02IC	01	AAC	20,650	1/1/2007	52	42	58	0	Alligator Cracking, Depression, L&T Cracking, Patching, Raveling, Weathering
TH02IC	02	PCC	53,361	1/1/2000	61	49	24	27	Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Scaling, Shattered Slab, Shrinkage Cracking
TH02IC	03	PCC	3,520	10/1/2016	98	0	100	0	Joint Seal Damage
TH02IC	04	PCC	5,659	10/1/2012	86	0	42	58	Faulting, Joint Seal Damage
TH02IC	05	PCC	6,300	7/1/2017	100	0	0	0	No Distresses

Table Notes:

1. See Figure 3 for the location of the branch and section.
2. Surface Type: AC = asphalt cement concrete; AAC = asphalt overlay on AC; PCC = portland cement concrete; APC = asphalt overlay on PCC.
3. LCD = last construction date.
4. Distress due to load includes distress types that are attributed to a structural deficiency in the pavement, such as alligator cracking or rutting on asphalt-surfaced pavements or shattered slabs on PCC pavements.
5. Distress due to climate or durability includes distress types that are attributed to either the aging of the pavement and the effects of the environment (such as weathering, raveling, or block cracking on asphalt-surfaced pavements) or to a materials-related problem (such as durability cracking or alkali-silica reaction [ASR] on PCC pavements). If materials-related distresses were recorded during the inspection, further laboratory testing is required to definitively determine the type present.
6. Distress due to other refers to distress types that are not attributed to one factor but rather may be caused by a combination of factors.
7. Distress types are defined by ASTM D5340-20. L&T Cracking = Longitudinal and Transverse Cracking; LTD Cracking = Longitudinal, Transverse, and Diagonal Cracking; ASR = Alkali-Silica Reaction.

Inspection Comments

Iowa City Municipal Airport was inspected on November 11, 2021. There were twenty-three pavement sections defined during the inspection.

Runways

Runway 07/25 was defined by three sections. Section 01 contained low-severity faulting; low- and medium-severity joint seal damage and small patching; and medium-severity longitudinal, transverse, and diagonal (LTD) cracking. Section 02 was in excellent condition with areas of low- and medium-severity joint seal damage and low-severity small patching observed during the inspection. Section 03 was also in excellent condition with low- and medium-severity joint seal damage and low-severity LTD cracking noted at the time of inspection.

Runway 12/30 consisted of one section in excellent condition. Low- and medium-severity joint seal damage, medium-severity joint spalling, and shrinkage cracking were recorded in Section 01.

Taxiways

Taxiway 01 connected Runway 07/25 and Runway 12/30 to the apron area and contained five sections. Section 01 had areas of low- and medium-severity joint reflection cracking and low-severity longitudinal and transverse (L&T) cracking, raveling, and weathering. All cracking was unsealed. Section 02 was in excellent condition with no distress identified at the time of inspection. Low- and medium-severity joint reflection cracking and weathering and low-severity L&T cracking and patching were recorded in Section 04. The joint reflection cracking and the L&T cracking were unsealed. Section 05 was in excellent condition and contained only low-severity joint seal damage. Areas of medium-severity alkali-silica reaction (ASR), low- and high-severity corner spalling, and low-severity joint seal damage were observed in Section 06. The suspected ASR was recorded in accordance with ASTM D5340-20. It should be noted that laboratory testing in the form of petrographic analysis is the only definitive way to validate the presence of ASR; however, the formation of a precipitate is evidence of a reaction consistent with this type of materials-related distress.

Taxiway 02 served as the parallel taxiway for Runway 07/25 and consisted of two sections that were both in excellent condition. Section 01 contained only areas of low-severity joint seal damage. Low-severity small patching was observed in Section 02. In addition, an atypical area of low- and medium-severity LTD cracking was identified and recorded as an additional sample unit, according to ASTM D5340-20.

Aprons

Apron 01 was defined by one section in excellent condition, with only low-severity small patching recorded.

Apron 02 consisted of two sections in excellent condition. Low-severity joint seal damage was identified throughout both Sections 01 and 02.

T-Hangars

T-hangar 01 contained four sections. Section 01 was in excellent condition with low-severity joint seal damage and small patching noted at the time of inspection. Section 02 contained low- and medium-severity alligator cracking, weathering, and L&T cracking; low-severity depression;

medium-severity joint reflection cracking; and all severities of raveling. The low-severity cracking was unsealed, and the medium-severity cracking was due to either unsealed crack widths that exceeded ¼ in, unsatisfactory crack sealant, or the development of secondary cracking. Section 03 was in poor condition with areas of high-severity corner break and joint seal damage, medium-severity corner spalling, low- and medium-severity LTD cracking, and medium- and high-severity scaling and shattered slab noted. Section 04 contained medium-severity alligator cracking, raveling, and weathering; low- and medium-severity L&T cracking and rutting; and low-severity patching. The low-severity L&T cracking was unsealed and the medium-severity L&T cracking was due to unsatisfactory crack sealant.

T-hangar 02 consisted of five sections. Section 01 contained areas of low- and medium-severity alligator cracking, patching, and L&T cracking; low-severity depression and raveling; and medium-severity weathering. The low-severity L&T cracking was unsealed, while the medium-severity L&T cracking was due to either unsealed cracking with widths greater than ¼ in or to the development of secondary cracking. All severities of corner break; low- and medium-severity corner spalling, LTD cracking, and shattered slab; medium- and high-severity joint seal damage and joint spalling; medium-severity scaling; low-severity large patching; and shrinkage cracking were noted in Section 02. Section 03 was in excellent condition with low-severity joint seal damage was recorded throughout. Section 04 contained medium-severity faulting and joint seal damage. Section 05 was in excellent condition with no distress noted at the time of inspection.

PAVEMENT MAINTENANCE AND REHABILITATION PROGRAM

Using the information collected during the pavement inspection, the PAVER pavement management software was used to develop a 5-year M&R program for Iowa City Municipal Airport. In addition, a 1-year plan for localized preventive maintenance (such as crack sealing and patching) was prepared.

Analysis Parameters

Critical PCIs

PAVER uses critical PCIs to determine whether localized preventive maintenance or major rehabilitation is the appropriate repair action. Above the critical PCI, localized preventive maintenance activities are recommended. Below the critical PCI, major rehabilitation actions, such as an overlay or reconstruction, are recommended. The Iowa DOT set the critical PCIs at 65 for runways, 60 for taxiways, and 55 for aprons and T-hangars.

Localized Preventive Maintenance Policies and Unit Costs

Localized preventive maintenance policies were developed for asphalt-surfaced and PCC pavements. These policies, shown in Appendix E, identify the localized preventive maintenance actions that the Iowa DOT considered appropriate to correct for the different distress types and severities. The Iowa DOT provided unit costs for each of the localized preventive maintenance actions included in these policies, and these costs are detailed in Appendix E. Please note that this information is of a general nature for the entire state. The localized preventive maintenance policies and unit costs may require adjustment to reflect specific conditions at Iowa City Municipal Airport.

Major Rehabilitation Unit Costs

PAVER estimates the cost of major rehabilitation based on the predicted PCI of the pavement section. The Iowa DOT provided the costs for major rehabilitation, and they are presented in Appendix E. If major rehabilitation is recommended in the 5-year program, further engineering investigation will be needed to identify the most appropriate rehabilitation action and to estimate the cost of such work more accurately.

Budget and Inflation Rate

An unlimited budget with a start date of July 1, 2022 and an inflation rate of 4.0 percent was used during the analysis.

Analysis Approach

The 5-year M&R program was prepared with the goal of maintaining the pavements above established critical PCIs. During this analysis, major rehabilitation was recommended for pavements in the year they dropped below their critical PCI. For the first year (2022) of the analysis only, a localized preventive maintenance plan was developed for those pavement sections that were above their critical PCI. If major rehabilitation was triggered for a section in 2023 or 2024, then localized preventive maintenance was not recommended for 2022. While localized preventive maintenance should be an annual undertaking at Iowa City Municipal Airport, it is not possible to accurately predict the propagation of cracking and other distress types. Therefore, the airport should budget for maintenance every year and can use the 2022

localized preventive maintenance plan as a baseline for that work. As the pavements age, it can be assumed that the amount of localized preventive maintenance required will increase.

Analysis Results

A summary of the M&R program for Iowa City Municipal Airport is presented in Table 2. Detailed information on the recommended localized preventive maintenance plan for 2022 is provided in Appendix F.

Table 2. 5-year M&R program under an unlimited funding analysis scenario.

Year	Branch	Section	Surface Type	Type of Repair	Estimated Cost
2022	R07IC	01	PCC	Preventive Maintenance	$13,390
2022	R07IC	02	PCC	Preventive Maintenance	$9,965
2022	R07IC	03	PCC	Preventive Maintenance	$4,514
2022	R12IC	01	PCC	Preventive Maintenance	$16,265
2022	T01IC	01	APC	Major Rehabilitation	$158,359
2022	T01IC	04	APC	Major Rehabilitation	$50,940
2022	T01IC	06	PCC	Preventive Maintenance	$3,303
2022	T02IC	02	PCC	Preventive Maintenance	$30
2022	TH01IC	02	APC	Major Rehabilitation	$64,289
2022	TH01IC	03	PCC	Major Rehabilitation	$141,856
2022	TH01IC	04	AAC	Major Rehabilitation	$874,521
2022	TH02IC	01	AAC	Major Rehabilitation	$101,870
2022	TH02IC	04	PCC	Preventive Maintenance	$2,588
2023	TH02IC	02	PCC	Major Rehabilitation	$456,279
				Total Estimated Cost:	**$1,898,000**

Table Notes:

1. See Figure 3 for the location of the branch and section.
2. Surface Type: AC = asphalt cement concrete; AAC = asphalt overlay on AC; PCC = portland cement concrete; APC = asphalt overlay on PCC.
3. Type of Repair: Major Rehabilitation such as pavement reconstruction or an overlay; Localized Preventive Maintenance such as crack sealing or patching.
4. The estimated costs provided are of a general nature for the entire state and may require adjustment to reflect specific conditions at Iowa City Municipal Airport.

The recommendations made in this report are based on a broad network-level analysis and meant to provide Iowa City Municipal Airport with an indication of the type of pavement-related work required during the next 5 years. Further engineering investigation may be necessary to identify which repair action is most appropriate. In addition, the cost estimates provided are based on overall unit costs for the entire state, and Iowa City Municipal Airport should adjust the plan to reflect local costs.

Because an unlimited budget was used in the analysis, it is possible that the pavement repair program may need to be adjusted to consider economic or operational constraints. The identification of a project need does not necessarily mean that state or federal funding will be available in the year it is indicated. It is important to remember that regardless of the

recommendations presented within this report, Iowa City Municipal Airport is responsible for repairing pavements where existing conditions pose a hazard to safe operations.

General Maintenance Recommendations

In addition to the specific maintenance actions presented in Appendix F, it is recommended that the following strategies be considered for prolonging pavement life:

1. Regularly inspect all safety areas of the airport and document all inspection activity. A sample form that can be used to perform these inspections is provided in Table 3 of this report.
2. Provide a method of tracking all maintenance activities that occur as a result of inspections. These need to be reported to the FAA and the Iowa DOT. This information is used to update the APMS records and is required to remain in compliance with Public Law 103-305 (see the next section of this report for further information on this law).
3. Conduct an aggressive campaign against weed growth through timely herbicide applications and mowing programs of the safety areas. Vegetation growth in pavement cracks is destructive and significantly increases the rate of pavement deterioration.
4. Implement a periodic crack and joint sealing program. Keeping water and debris out of the pavement system by sealing cracks and joints is a proven and cost-effective method of extending the life of the pavement system.
5. 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.
6. Closely monitor the movement of heavy equipment (particularly farming, construction, and fueling equipment) to make sure it is only operating on pavements that are designed to accommodate heavy loads. Failure to restrict heavy equipment to appropriate areas may result in the premature failure of airport pavements.

FAA Requirements (Public Law 103-305)

Because Iowa City Municipal Airport is in the National Plan of Integrated Airport Systems (NPIAS), the airport sponsor is required to keep the airport in a viable operating condition. This includes maintaining airport pavements in accordance with Public Law 103-305. Public Law 103-305 states that after January 1, 1995, NPIAS 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 federal funding of pavement replacement or reconstruction projects. To be in full compliance with the federal law, the PMMS must include the following components at minimum: pavement inventory, pavement inspections, record keeping, information retrieval, and program funding.

This report serves as a complete pavement inventory and detailed inspection. To remain in compliance with the law, Iowa City Municipal Airport will also need to undertake monthly drive-by inspections of pavement conditions and track pavement-related maintenance activities.

FAA Advisory Circular 150/5380-7B provides detailed guidance pertaining to the requirements for an acceptable pavement management program (PMP). Appendix A of the FAA Advisory Circular 150/5380-7B outlines what needs to be included in a PMP to remain in compliance with this law and Grant Assurance #11. The following is a copy of this Appendix, along with

instructions for supplementing this report so that all requirements are met. Note that the italicized words are direct quotations from the FAA Advisory Circular.

FAA Advisory Circular 150/5830-7B, Appendix A. Pavement Management Program (PMP)

A-1.0. *An effective PMP specifies the procedures to follow to assure that proper preventative and remedial pavement maintenance is performed. The program should identify funding or anticipated funding and other resources available to provide remedial and preventive maintenance activities. An airport sponsor may use any format deemed appropriate, but the program needs to, as a minimum, include the following:*

A-1.1. Pavement Inventory. *The following must be depicted:*

a. Identification of all runways, taxiways, and aprons with pavement broken down into sections each having similar properties.

The network definition map provided in Figure 3 of this report shows the location of all runways, taxiways, aprons, and T-hangars at Iowa City Municipal Airport. If any new pavements are constructed or any pavement areas are permanently closed, this map must be updated. Project plans should be submitted to the Iowa DOT after project completion.

b. Dimensions of pavement sections.

The dimensions of all runways, taxiways, aprons, and T-hangars are stored in the PAVER database. Appendix C provides information on length, width, and area. In addition, the network definition map (Figure 3) is drawn to scale. Any changes to pavement dimensions must be recorded.

c. Type of pavement surface.

The type of pavement for each section at Iowa City Municipal Airport is listed in Table 1 of this report and is also stored in the PAVER database. Any changes to pavement type (through an overlay or reconstruction) must be recorded.

d. Year of construction and/or most recent major rehabilitation.

Dates for pavement construction, rehabilitation, or reconstruction must be recorded. The current pavement history for Iowa City Municipal Airport is provided in Appendix D of this report.

e. Whether AIP [Airport Improvement Program] or PFC [Passenger Facility Charge] funds were used to construct, reconstruct, or repair the pavement.

Funding sources for all pavement projects should be recorded.

A-1.2. PMP Pavement Inspection Schedule. *Airports must perform a detailed inspection of airfield pavements at least once a year for the PMP. If a pavement condition index (PCI) survey is performed, as set forth in ASTM D5340, Standard Test Method for Airport Pavement Condition Index Surveys, the frequency of the detailed inspection by PCI surveys may be extended to three years. Less comprehensive routine daily, weekly, and monthly maintenance inspections required for operations should be addressed.*

This report consists of a detailed inspection that will extend the inspection period to 3 years. It is the airport sponsor's responsibility to perform monthly drive-by inspections. A sample pavement inspection report form is provided in Table 3 of this report.

A-1.3. Record Keeping. *The airport must record and keep on file complete information about all detailed inspections and maintenance performed until the pavement system is replaced. The types of distress, their locations, and remedial action, scheduled or performed, must be documented. The minimum information recorded includes:*

a. *Inspection date*

b. Location

c. Distress types

d. Maintenance scheduled or performed

Items a through c are satisfied by this inspection report. Item d is the responsibility of the airport, as is record keeping of the monthly drive-by inspections.

A-1.4. Information Retrieval. *An airport sponsor may use any form of record keeping it deems appropriate so long as the information and records from the pavement survey can generate required reports, as necessary.*

Keep this report, monthly drive-by inspection reports, construction updates, and all records of maintenance activities in a readily accessible location so that they can be easily retrieved as requested by the FAA.

Table 3. Pavement inspection report.

Inspected By: _____

Date Inspected: _____

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
A01IC	01					
A02IC	01					
A02IC	02					
R07IC	01					
R07IC	02					
R07IC	03					

Table 3. Pavement inspection report (continued).

Inspected By: _____

Date Inspected: _____

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
R12IC	01					
T01IC	01					
T01IC	02					
T01IC	04					
T01IC	05					
T01IC	06					

Table 3. Pavement inspection report (continued).

Inspected By: _____

Date Inspected: _____

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
T02IC	01					
T02IC	02					
TH01IC	01					
TH01IC	02					
TH01IC	03					
TH01IC	04					

Table 3. Pavement inspection report (continued).

Inspected By: _____

Date Inspected: _____

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
TH02IC	01					
TH02IC	02					
TH02IC	03					
TH02IC	04					
TH02IC	05					

Table Notes:

1. See Figure 3 for the location of the branch and section.

SUMMARY

This report documents the results of the pavement evaluation conducted at Iowa City Municipal Airport. A visual inspection of the pavements in 2021 found that the overall condition of the pavement network is a PCI of 90. A 5-year pavement repair program, shown in Table 2, was generated for Iowa City Municipal Airport, which revealed that approximately $1,898,000 needs to be expended on M&R. Iowa City Municipal Airport should utilize these study results to assist in planning for future maintenance needs as part of the airport CIP planning process.

APPENDIX A

CAUSE OF DISTRESS TABLES

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

Distress Type	Probable Cause of Distress
Alligator Cracking	Fatigue failure of the asphalt surface under repeated traffic loading.
Bleeding	Excessive amounts of asphalt cement or tars in the mix or low air void content, or both.
Block Cracking	Shrinkage of the asphalt and daily temperature cycling; it is not load associated.
Corrugation	Traffic action combined with an unstable pavement layer.
Depression	Settlement of the foundation soil or can be "built up" during construction.
Jet-Blast Erosion	Bituminous binder has been burned or carbonized.
Joint Reflection Cracking	Movement of the concrete slab beneath the asphalt surface due to thermal and moisture changes.
L&T Cracking	Cracks may be caused by (1) a poorly constructed paving lane joint, (2) shrinkage of the asphalt surface due to low temperatures or hardening of the asphalt, or (3) reflective cracking caused by cracks in an underlying PCC slab.
Oil Spillage	Deterioration or softening of the pavement surface caused by the spilling of oil, fuel, or other solvents.
Patching	N/A
Polished Aggregate	Repeated traffic applications.
Raveling	Asphalt binder may have hardened significantly, causing coarse aggregate pieces to dislodge.
Rutting	Usually caused by consolidation or lateral movement of the materials due to traffic loads.
Shoving	Where PCC pavements adjoin flexible pavements, PCC "growth" may shove the asphalt pavement.
Slippage Cracking	Low strength surface mix or poor bond between the surface and the next layer of the pavement structure.
Swelling	Usually caused by frost action or by swelling soil.
Weathering	Asphalt binder and/or fine aggregate may wear away as the pavement ages and hardens.

Table A-2. Cause of pavement distress, PCC pavements.

Distress Type	Probable Cause of Distress
ASR	Chemical reaction of alkalis in the portland cement with certain reactive silica minerals. ASR may be accelerated by the use of chemical pavement deicers.
Blowup	Incompressible materials in the joints.
Corner Break	Load repetition combined with loss of support and curling stresses.
Durability Cracking	Concrete's inability to withstand environmental factors such as freeze-thaw cycles.
Faulting	Upheaval or consolidation.
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 the joint.
LTD Cracking	Combination of load repetition, curling stresses, and shrinkage stresses.
Patching (Small and Large)	N/A
Popouts	Freeze-thaw action in combination with expansive aggregates.
Pumping	Poor drainage, poor joint sealant.
Scaling	Over finishing of concrete, deicing salts, improper construction, freeze-thaw cycles, and poor aggregate.
Shattered Slab	Load repetition.
Shrinkage Cracking	Setting and curing of the concrete.
Spalling (Joint and Corner)	Excessive stresses at the joint caused by infiltration of incompressible materials or traffic loads; weak concrete at the joint combined with traffic loads.

APPENDIX B

INSPECTION PHOTOGRAPHS

A01IC-01. Overview.

A01IC-01. Small Patching (Sample Unit No. 06).

A02IC-01. Overview.

A02IC-02. Overview.

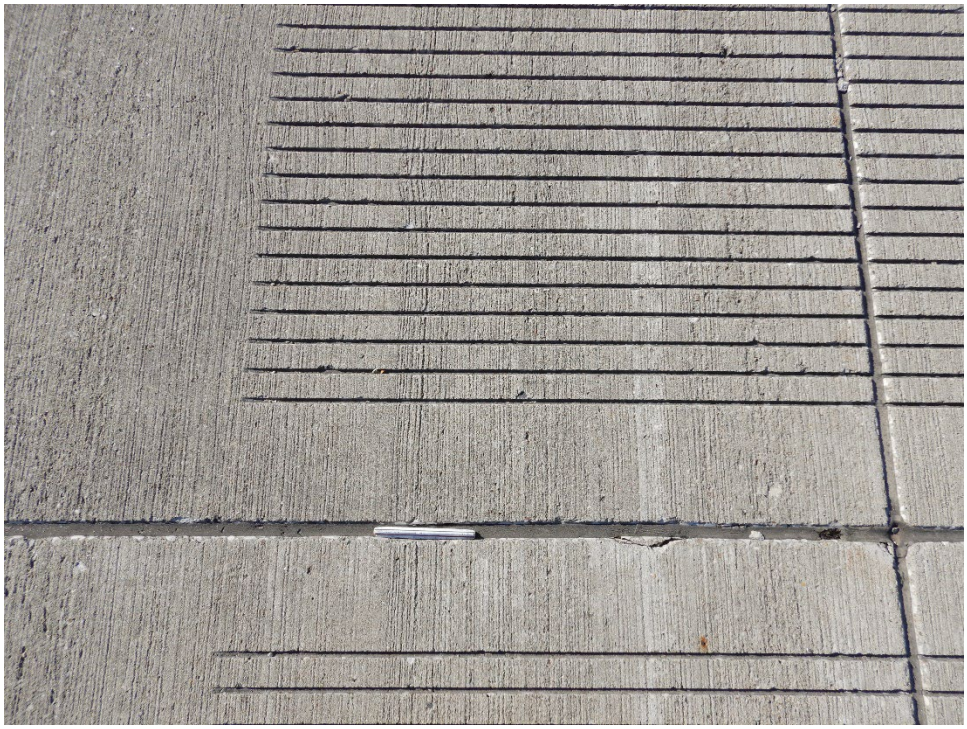
R07IC-01. Overview.

R07IC-01. LTD Cracking (Sample Unit No. 53).

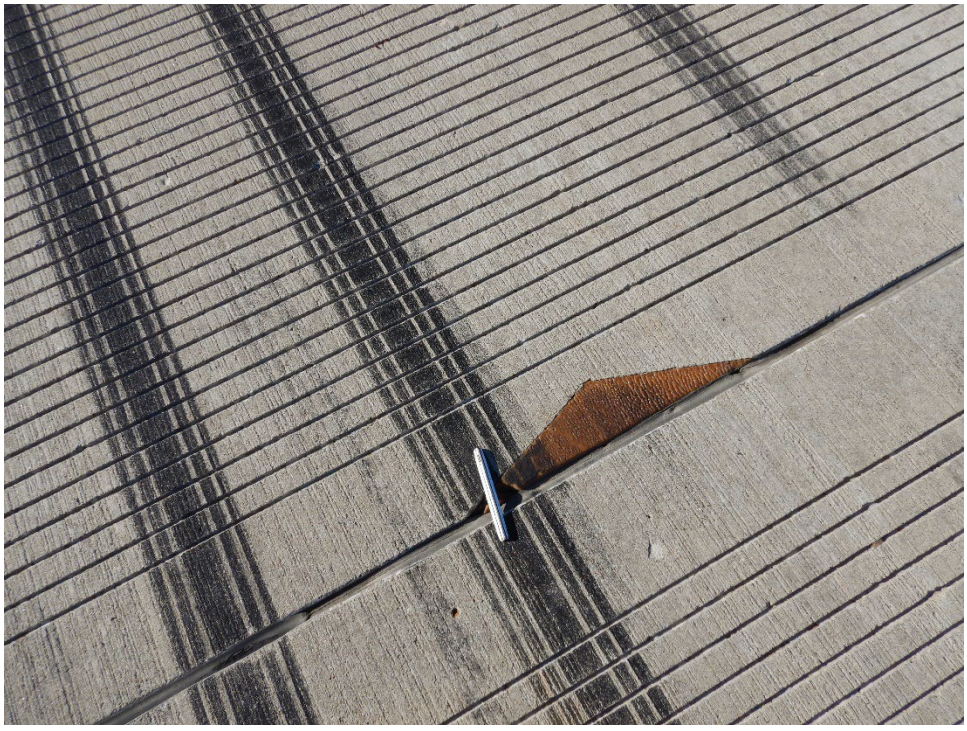
R07IC-01. Small Patching (Additional Sample Unit No. 36).

R07IC-02. Overview.

R07IC-02. Joint Seal Damage (Sample Unit No. 48).

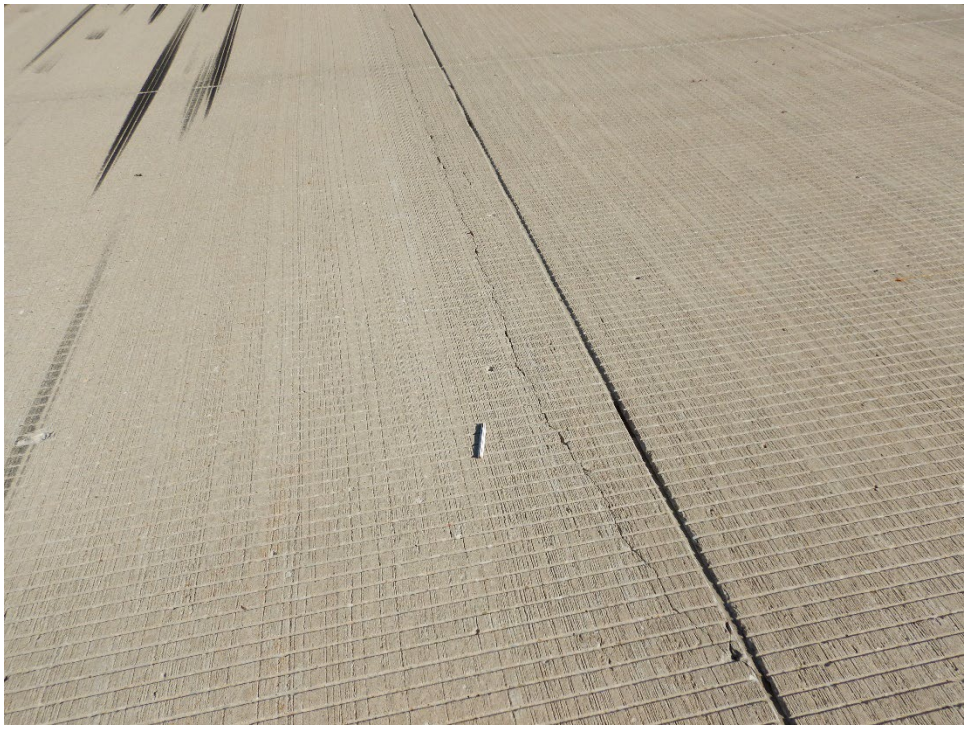


R07IC-02. Small Patching (Sample Unit No. 08).



R07IC-03. Overview.

R07IC-03. LTD Cracking (Sample Unit No. 16).

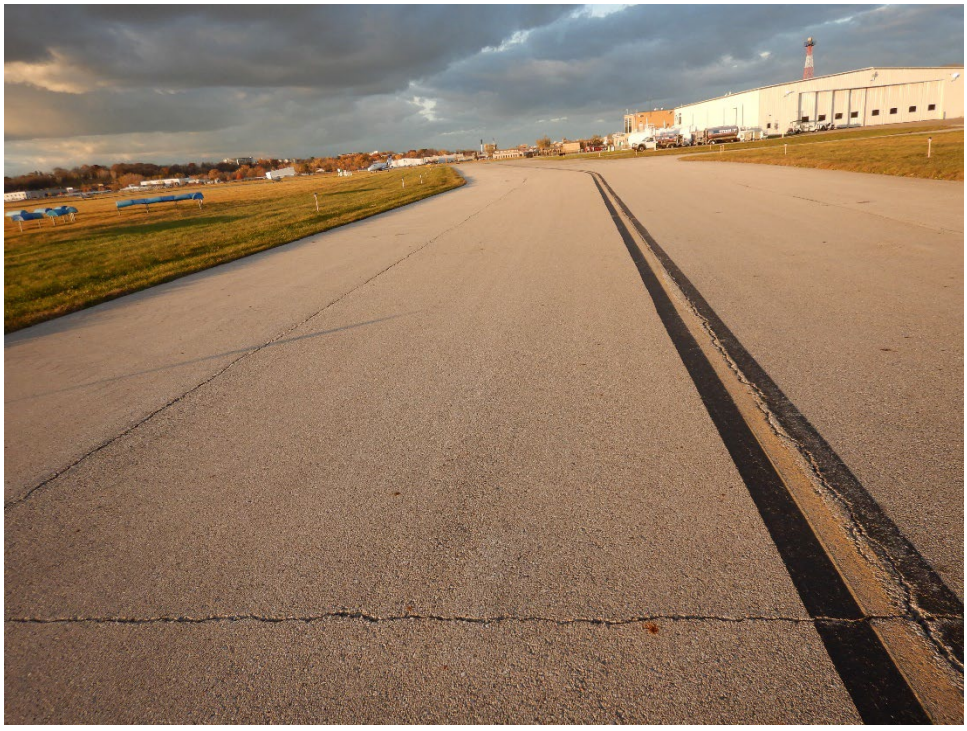


R12IC-01. Overview.

R12IC-01. Joint Seal Damage (Sample Unit No. 11).

R12IC-01. Joint Spalling (Sample Unit No. 35).

T01IC-01. Overview.



T01IC-01. Joint Reflection Cracking (Sample Unit No. 06).

T01IC-01. Weathering (Sample Unit No. 06).

T01IC-02. Overview.

T01IC-04. Overview.

T01IC-04. L&T Cracking (Sample Unit No. 02).

T01IC-04. Patching (Sample Unit No. 02).

T01IC-04. Weathering (Sample Unit No. 02).

T01IC-05. Overview.

T01IC-06. Overview.

T01IC-06. ASR (Sample Unit No. 01).

T01IC-06. Corner Spalling (Sample Unit No. 01).

T02IC-01. Overview.

T02IC-02. Overview.

T02IC-02. LTD Cracking (Additional Sample Unit No. 89).

T02IC-02. Small Patching (Sample Unit No. 25).

TH01IC-01. Overview.

TH01IC-01. Small Patching (Sample Unit No. 04).

TH01IC-02. Overview.

TH01IC-02. Alligator Cracking (Sample Unit No. 02).

TH01IC-02. L&T Cracking (Sample Unit No. 01).

TH01IC-02. Weathering (Sample Unit No. 01).

TH01IC-03. Overview.

TH01IC-03. Corner Break (Sample Unit No. 02).

TH01IC-03. Shattered Slab (Sample Unit No. 02).

TH01IC-04. Overview.

TH01IC-04. Alligator Cracking (Sample Unit No. 17).

TH02IC-01. Overview.

TH02IC-01. Alligator Cracking (Sample Unit No. 03) (1).

TH02IC-01. Alligator Cracking (Sample Unit No. 03) (2).

TH02IC-01. Patching (Sample Unit No. 02).

TH02IC-01. Weathering (Sample Unit No. 03).

TH02IC-02. Overview.

TH02IC-02. Corner Break (Sample Unit No. 13).

TH02IC-02. Joint Spalling (Sample Unit No. 17).

TH02IC-02. LTD Cracking (Sample Unit No. 02).

TH02IC-03. Overview.

TH02IC-03. Joint Seal Damage (Sample Unit No. 01).

TH02IC-04. Overview.

TH02IC-05. Overview.

APPENDIX C

INSPECTION REPORT

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Pavement Database: IA 2021 | Generate Date: 4/27/2022

Network ID: IOW |

Branch - Section ID: A01IC - 01

Branch Name: APRON 01 | Use: APRON

LCD: 6/2/2020
Surface Type: PCC
Rank: P
Section Area (sf): 25,168.00
Length (ft): 241.00
Width (ft): 100.00
From: BUILDING
To: TAXIWAY 01 SECT 01

PCI Family: IowaPCCAPSE_CommEnhanced

Slabs: 161
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 3,670.77

Section Comments:

Last Insp Date: 11/11/2021
PCI: 100
Total Samples: 8
Surveyed: 5

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 03

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 06

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

66 SMALL PATCH	L	2 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 21

Sample Comments:

NO DISTRESS

Sample Number: 08

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 16

Sample Comments:

NO DISTRESS

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: A02IC - 01

Branch Name: APRON 02 Use: APRON

LCD: 6/1/2007
Surface Type: PCC
Rank: P
Section Area (sf): 44,939.00
Length (ft): 240.00
Width (ft): 192.00
From: .
To: TAXIWAY 01 SECT 01

PCI Family: IowaPCCAPSE_CommEnhanced

Slabs: 250
Slab Length (ft): 15.00
Slab Width (ft): 12.00
Joint Length (ft): 6,319.55

Section Comments: ESTIMATE DATE

Last Insp Date: 11/11/2021
PCI: 98
Total Samples: 16
Surveyed: 6

Inspection Comments:

Sample Number: 04

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 10

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 13

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 16

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: A02IC - 02

Branch Name: APRON 02 Use: APRON

LCD: 7/1/2016
Surface Type: PCC
Rank: P
Section Area (sf): 22,470.00
Length (ft): 240.00
Width (ft): 96.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCAPSE_CommEnhanced

Slabs: 125
Slab Length (ft): 15.00
Slab Width (ft): 12.00
Joint Length (ft): 3,042.81

Section Comments:

Last Insp Date: 11/11/2021
PCI: 98
Total Samples: 8
Surveyed: 5

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: R07IC - 01

Branch Name: RUNWAY 07/25 Use: RUNWAY

LCD: 4/3/2009
Surface Type: PCC
Rank: P
Section Area (sf): 243,002.00
Length (ft): 2,430.00
Width (ft): 100.00
From: RUNWAY 07 SECT 01
To: RUNWAY END 25 (07/25)

PCI Family: IowaPCCRWSE_Enhanced

Slabs: 1,296
Slab Length (ft): 15.00
Slab Width (ft): 12.50
Joint Length (ft): 33,110.27

Section Comments:

Last Insp Date: 11/11/2021
PCI: 94
Total Samples: 64
Surveyed: 9

Inspection Comments:

Sample Number: 05

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 25

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 28

Sample Type: R
Sample PCI: 97
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs
66 SMALL PATCH	L	1	Slabs

Sample Number: 36

Sample Type: A
Sample PCI: 88
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs
66 SMALL PATCH	M	2	Slabs
71 FAULTING	L	1	Slabs

Sample Number: 37

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20
Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 40

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20
Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 53

Sample Type: R
Sample PCI: 66
Sample Area (Slabs): 20
Sample Comments:

63 LINEAR CR	M	3	Slabs
65 JT SEAL DMG	M	20	Slabs
71 FAULTING	L	1	Slabs

Sample Number: 56

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20
Sample Comments:

65 JT SEAL DMG	L	20	Slabs

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: R07IC - 02

Branch Name: RUNWAY 07/25 Use: RUNWAY

LCD: 10/3/2009
Surface Type: PCC
Rank: P
Section Area (sf): 193,887.00
Length (ft): 1,939.00
Width (ft): 100.00
From: RUNWAY 07 SECT 02
To: RUNWAY END 25 (07/25)

PCI Family: IowaPCCRWSE_Enhanced

Slabs: 1,034
Slab Length (ft): 15.00
Slab Width (ft): 12.50
Joint Length (ft): 26,397.90

Section Comments:

Last Insp Date: 11/11/2021
PCI: 97
Total Samples: 52
Surveyed: 8

Inspection Comments:

Sample Number: 05

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 97
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs
66 SMALL PATCH	L	1	Slabs

Sample Number: 21

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 24

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	M	20	Slabs

Sample Number: 33

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 36

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20	Slabs

Sample Number: 45

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Sample Number: 48

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Branch - Section ID: R07IC - 03

Branch Name: RUNWAY 07/25 Use: RUNWAY

LCD: 10/2/2008
Surface Type: PCC
Rank: P
Section Area (sf): 77,286.00
Length (ft): 773.00
Width (ft): 100.00
From: RUNWAY END 07 (07/25)
To: RUNWAY 07 SECT 06

PCI Family: IowaPCCRWSE_Enhanced

Slabs: 412
Slab Length (ft): 15.00
Slab Width (ft): 12.50
Joint Length (ft): 10,462.44

Section Comments:

Last Insp Date: 11/11/2021
PCI: 97
Total Samples: 22
Surveyed: 7

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	M	20 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Sample Number: 13

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Sample Number: 16

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	L	20 Slabs

Sample Number: 17

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Sample Number: 20

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Branch - Section ID: R12IC - 01

Branch Name: RUNWAY 12/30 Use: RUNWAY

LCD: 10/3/2009
Surface Type: PCC
Rank: S
Section Area (sf): 283,221.00
Length (ft): 3,770.00
Width (ft): 100.00
From: .
To: .

PCI Family: IowaPCCRWSE_Enhanced

Slabs: 1,813
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 42,408.03

Section Comments:

Last Insp Date: 11/11/2021
PCI: 97
Total Samples: 77
Surveyed: 9

Inspection Comments:

Sample Number: 05

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 11

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs

Sample Number: 15

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 25

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 35

Sample Type: R
Sample PCI: 94
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
73 SHRINKAGE CR	N	1 Slabs
74 JOINT SPALL	M	1 Slabs

Sample Number: 45

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 55

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 65

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 75

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Branch - Section ID: T01IC - 01

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/1/2013
Surface Type: APC
Rank: P
Section Area (sf): 32,101.00
Length (ft): 650.00
Width (ft): 50.00
From: RUNWAY 12/30
To: RUNWAY 7/25

PCI Family: IowaAPCTWSouthern

Slabs:
Slab Length (ft):
Slab Width (ft):
Joint Length (ft):

Section Comments:

Last Insp Date: 11/11/2021
PCI: 57
Total Samples: 7
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 60
Sample Area (SF): 5,000

Sample Comments:

47 JT REF. CR	L	250	Ft	LU
47 JT REF. CR	M	200	Ft	W
52 RAVELING	L	1,000	SF	
57 WEATHERING	L	5,000	SF	

Sample Number: 02

Sample Type: R
Sample PCI: 60
Sample Area (SF): 5,000

Sample Comments:

47 JT REF. CR	L	276	Ft	LU
47 JT REF. CR	M	200	Ft	W
52 RAVELING	L	1,000	SF	
57 WEATHERING	L	5,000	SF	

Sample Number: 05

Sample Type: R
Sample PCI: 57
Sample Area (SF): 5,000

Sample Comments:

47 JT REF. CR	L	225	Ft	LU
47 JT REF. CR	M	250	Ft	W
52 RAVELING	L	1,000	SF	
57 WEATHERING	L	5,000	SF	

Sample Number: 06

Sample Type: R
Sample PCI: 50
Sample Area (SF): 3,750

Sample Comments:

47 JT REF. CR	L	137	Ft	LU
47 JT REF. CR	M	250	Ft	W
48 L & T CR	L	11	Ft	LU
52 RAVELING	L	750	SF	
57 WEATHERING	L	3,750	SF	

Branch - Section ID: T01IC - 02

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/2/2020
Surface Type: PCC
Rank: P
Section Area (sf): 16,542.00
Length (ft): 330.00
Width (ft): 50.00
From: T01IC-01
To: T01IC-04

PCI Family: IowaPCCTWSE_Enhanced

Slabs: 105
Slab Length (ft): 12.50
Slab Width (ft): 12.60
Joint Length (ft): 2,255.25

Section Comments:

Last Insp Date: 11/11/2021
PCI: 100
Total Samples: 5
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 02

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 04

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 05

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 18

Sample Comments:

NO DISTRESS

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: T01IC - 04

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/1/2013
Surface Type: APC
Rank: P
Section Area (sf): 10,326.00
Length (ft): 200.00
Width (ft): 50.00
From: S END OF TWY 01-03
To: END OF TWY 01-05

PCI Family: IowaAPCTWSouthern

Slabs:
Slab Length (ft):
Slab Width (ft):
Joint Length (ft):

Section Comments:

Last Insp Date: 11/11/2021
PCI: 56
Total Samples: 2
Surveyed: 2

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 61
Sample Area (SF): 5,000

Sample Comments:

47 JT REF. CR	L	375	Ft	U
47 JT REF. CR	M	200	Ft	W
48 L & T CR	L	44	Ft	U
57 WEATHERING	L	5,000	SF	

Sample Number: 02

Sample Type: R
Sample PCI: 52
Sample Area (SF): 5,326

Sample Comments:

47 JT REF. CR	L	225	Ft	LU
47 JT REF. CR	M	265	Ft	W
48 L & T CR	L	11	Ft	LU
50 PATCHING	L	125	SF	
57 WEATHERING	L	5,101	SF	
57 WEATHERING	M	100	SF	

Branch - Section ID: T01IC - 05

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/3/2012
Surface Type: PCC
Rank: P
Section Area (sf): 26,020.00
Length (ft): 520.00
Width (ft): 50.00
From: N END OF TWY 01-03
To: THE END OF TWY 01-04

PCI Family: IowaPCCTWSE_Enhanced

Slabs: 296
Slab Length (ft): 10.00
Slab Width (ft): 8.80
Joint Length (ft): 4,988.38

Section Comments:

Last Insp Date: 11/11/2021
PCI: 100
Total Samples: 12
Surveyed: 6

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 05

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 06

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 11

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 21

Sample Comments:

NO DISTRESS

Sample Number: 12

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 21

Sample Comments:

NO DISTRESS

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: T01IC - 06

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 10/15/2009
Surface Type: PCC
Rank: P
Section Area (sf): 12,680.00
Length (ft): 250.00
Width (ft): 50.00
From: RUNWAY 7
To: TAXIWAY 01-01

PCI Family: IowaPCCTWSE_Enhanced

Slabs: 88
Slab Length (ft): 12.00
Slab Width (ft): 12.00
Joint Length (ft): 1,809.01

Section Comments:

Last Insp Date: 11/11/2021
PCI: 93
Total Samples: 4
Surveyed: 3

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
75 CORNER SPALL	H	1 Slabs
76 ASR	M	1 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 24

Sample Comments:

75 CORNER SPALL	L	1 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 19

Sample Comments:

NO DISTRESS

Branch - Section ID: T02IC - 01

Branch Name: TAXIWAY 02 Use: TAXIWAY

LCD: 10/15/2008
Surface Type: PCC
Rank: P
Section Area (sf): 10,933.00
Length (ft): 275.00
Width (ft): 35.00
From: RUNWAY 7-3
To: END

PCI Family: IowaPCCTWSE_Enhanced

Slabs: 75
Slab Length (ft): 12.50
Slab Width (ft): 11.60
Joint Length (ft): 1,465.01

Section Comments:

Last Insp Date: 11/11/2021
PCI: 99
Total Samples: 4
Surveyed: 3

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 03

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	L	18 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 18

Sample Comments:

NO DISTRESS

Branch - Section ID: T02IC - 02

Branch Name: TAXIWAY 02 Use: TAXIWAY

LCD: 6/3/2012
Surface Type: PCC
Rank: P
Section Area (sf): 197,985.00
Length (ft): 5,400.00
Width (ft): 35.00
From: T02IC-01
To: R07IC-01

PCI Family: IowaPCCTWSE_Enhanced

Slabs: 2,095
Slab Length (ft): 10.80
Slab Width (ft): 8.75
Joint Length (ft): 35,265.42

Section Comments:

Last Insp Date: 11/11/2021
PCI: 100
Total Samples: 105
Surveyed: 13

Inspection Comments:

Sample Number: 005

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 015

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 025

Sample Type: R
Sample PCI: 99
Sample Area (Slabs): 20

Sample Comments:

66 SMALL PATCH	L	1 Slabs

Sample Number: 035

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 045

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 055

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 065

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 075

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 085

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 089

Sample Type: A
Sample PCI: 84
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	L	1 Slabs
63 LINEAR CR	M	1 Slabs

Sample Number: 090

Sample Type: A
Sample PCI: 95
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	L	1 Slabs

Sample Number: 095

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 102

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Branch - Section ID: TH01IC - 01

Branch Name: T-HANGAR 01 Use: T-HANGAR

LCD: 6/3/2012
Surface Type: PCC
Rank: P
Section Area (sf): 8,500.00
Length (ft): 215.00
Width (ft): 40.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SE

Slabs: 112
Slab Length (ft): 8.70
Slab Width (ft): 8.75
Joint Length (ft): 1,696.41

Section Comments: avg slabs

Last Insp Date: 11/11/2021
PCI: 99
Total Samples: 5
Surveyed: 4

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 25

Sample Comments:

NO DISTRESS

Sample Number: 03

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 04

Sample Type: R
Sample PCI: 97
Sample Area (Slabs): 28

Sample Comments:

65 JT SEAL DMG	L	28	Slabs
66 SMALL PATCH	L	1	Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 21

Sample Comments:

65 JT SEAL DMG	L	21	Slabs

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: TH01IC - 02

Branch Name: T-HANGAR 01 Use: T-HANGAR

LCD: 7/1/2009
Surface Type: APC
Rank: P
Section Area (sf): 9,559.00
Length (ft): 285.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaASPHALTTHSouthern

Slabs:
Slab Length (ft):
Slab Width (ft):
Joint Length (ft):

Section Comments:

Last Insp Date: 11/11/2021
PCI: 48
Total Samples: 2
Surveyed: 2

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 55
Sample Area (SF): 4,375

Sample Comments:

41 ALLIGATOR CR	L	20	SF	
48 L & T CR	L	87	Ft	LU
48 L & T CR	M	95	Ft	FS W
52 RAVELING	L	2,000	SF	
57 WEATHERING	L	2,375	SF	
57 WEATHERING	M	2,000	SF	

Sample Number: 02

Sample Type: R
Sample PCI: 41
Sample Area (SF): 5,184

Sample Comments:

41 ALLIGATOR CR	M	30	SF	
45 DEPRESSION	L	5	SF	AT CRK
47 JT REF. CR	M	130	Ft	FS
48 L & T CR	L	176	Ft	LU
48 L & T CR	M	90	Ft	FS SEC CRK
52 RAVELING	H	2	SF	
52 RAVELING	L	2,000	SF	
52 RAVELING	M	18	SF	
57 WEATHERING	L	3,164	SF	
57 WEATHERING	M	2,000	SF	

Branch - Section ID: TH01IC - 03

Branch Name: T-HANGAR 01 Use: T-HANGAR

LCD: 1/1/1945
Surface Type: PCC
Rank: P
Section Area (sf): 8,161.00
Length (ft): 120.00
Width (ft): 90.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SE

Slabs: 46
Slab Length (ft): 17.70
Slab Width (ft): 10.00
Joint Length (ft): 1,118.49

Section Comments: avg slab length

Last Insp Date: 11/11/2021
PCI: 22
Total Samples: 2
Surveyed: 2

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 40
Sample Area (Slabs): 21

Sample Comments:

63 LINEAR CR	L	2 Slabs
63 LINEAR CR	M	9 Slabs
65 JT SEAL DMG	H	21 Slabs
70 SCALING	M	1 Slabs
75 CORNER SPALL	M	2 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 7
Sample Area (Slabs): 25

Sample Comments:

62 CORNER BREAK	H	3 Slabs
63 LINEAR CR	M	4 Slabs
65 JT SEAL DMG	H	25 Slabs
70 SCALING	H	1 Slabs
72 SHAT. SLAB	H	5 Slabs
72 SHAT. SLAB	M	6 Slabs
75 CORNER SPALL	M	1 Slabs

Branch - Section ID: TH01IC - 04

Branch Name: T-HANGAR 01 Use: T-HANGAR

LCD: 7/1/2009
Surface Type: AAC
Rank: P
Section Area (sf): 83,972.00
Length (ft): 1,420.00
Width (ft): 25.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaASPHALTTHSouthern

Slabs:
Slab Length (ft):
Slab Width (ft):
Joint Length (ft):

Section Comments:

Last Insp Date: 11/11/2021
PCI: 41
Total Samples: 18
Surveyed: 5

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 70
Sample Area (SF): 5,000

Sample Comments:

41 ALLIGATOR CR	M	15	SF	
48 L & T CR	L	5	Ft	
48 L & T CR	M	62	Ft	
57 WEATHERING	M	5,000	SF	

Sample Number: 07

Sample Type: R
Sample PCI: 42
Sample Area (SF): 4,875

Sample Comments:

41 ALLIGATOR CR	M	175	SF	
48 L & T CR	L	45	Ft	LU
48 L & T CR	M	155	Ft	FS
50 PATCHING	L	400	SF	
57 WEATHERING	M	4,475	SF	

Sample Number: 08

Sample Type: R
Sample PCI: 44
Sample Area (SF): 4,875

Sample Comments:

41 ALLIGATOR CR	M	150	SF	
48 L & T CR	M	92	Ft	FS
50 PATCHING	L	752	SF	
57 WEATHERING	M	4,123	SF	

Sample Number: 13

Sample Type: R
Sample PCI: 33
Sample Area (SF): 4,875

Sample Comments:

41 ALLIGATOR CR	M	90	SF	
48 L & T CR	L	76	Ft	LU
48 L & T CR	M	200	Ft	FS
50 PATCHING	L	539	SF	
52 RAVELING	M	250	SF	
53 RUTTING	M	50	SF	
57 WEATHERING	M	4,086	SF	

Sample Number: 17

Sample Type: R
Sample PCI: 16
Sample Area (SF): 5,000

Sample Comments:

41 ALLIGATOR CR	M	900	SF	
48 L & T CR	L	75	Ft	
48 L & T CR	M	75	Ft	
50 PATCHING	L	1,857	SF	
53 RUTTING	L	50	SF	
53 RUTTING	M	30	SF	
57 WEATHERING	M	3,143	SF	

Branch - Section ID: TH02IC - 01

Branch Name: T-HANGAR 02 Use: T-HANGAR

LCD: 1/1/2007
Surface Type: AAC
Rank: P
Section Area (sf): 20,650.00
Length (ft): 590.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaASPHALTTHSouthern

Slabs:
Slab Length (ft):
Slab Width (ft):
Joint Length (ft):

Section Comments:

Last Insp Date: 11/11/2021
PCI: 52
Total Samples: 4
Surveyed: 3

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 65
Sample Area (SF): 5,500

Sample Comments:

48 L & T CR	L	42	Ft	LU
48 L & T CR	M	110	Ft	W
50 PATCHING	L	75	SF	
50 PATCHING	M	25	SF	
52 RAVELING	L	1,000	SF	
57 WEATHERING	M	5,400	SF	

Sample Number: 02

Sample Type: R
Sample PCI: 50
Sample Area (SF): 4,375

Sample Comments:

41 ALLIGATOR CR	L	20	SF	
41 ALLIGATOR CR	M	30	SF	
48 L & T CR	M	46	Ft	W SEC CRK
50 PATCHING	L	140	SF	
52 RAVELING	L	1,000	SF	
57 WEATHERING	M	4,235	SF	

Sample Number: 03

Sample Type: R
Sample PCI: 37
Sample Area (SF): 4,400

Sample Comments:

41 ALLIGATOR CR	L	15	SF	
41 ALLIGATOR CR	L	70	SF	EDGE
41 ALLIGATOR CR	M	100	SF	
45 DEPRESSION	L	5	SF	
48 L & T CR	M	40	Ft	SEC CRK
50 PATCHING	L	66	SF	
50 PATCHING	M	50	SF	
52 RAVELING	L	1,000	SF	
57 WEATHERING	M	4,284	SF	

Branch - Section ID: TH02IC - 02

Branch Name: T-HANGAR 02 Use: T-HANGAR

LCD: 1/1/2000
Surface Type: PCC
Rank: P
Section Area (sf): 53,361.00
Length (ft): 1,230.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SE

Slabs: 445
Slab Length (ft): 12.00
Slab Width (ft): 10.00
Joint Length (ft): 8,214.87

Section Comments: avg slab length

Last Insp Date: 11/11/2021
PCI: 61
Total Samples: 17
Surveyed: 7

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 87
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	L	2 Slabs
65 JT SEAL DMG	M	20 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	M	20 Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 47
Sample Area (Slabs): 20

Sample Comments:

62 CORNER BREAK	H	1 Slabs
62 CORNER BREAK	L	1 Slabs
62 CORNER BREAK	M	2 Slabs
63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	H	20 Slabs
72 SHAT. SLAB	M	1 Slabs
73 SHRINKAGE CR	N	1 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	M	1 Slabs

Sample Number: 11

Sample Type: R
Sample PCI: 48
Sample Area (Slabs): 20

Sample Comments:

62 CORNER BREAK	L	1 Slabs
62 CORNER BREAK	M	1 Slabs
63 LINEAR CR	L	1 Slabs
63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	H	20 Slabs
67 LARGE PATCH	L	2 Slabs
70 SCALING	M	1 Slabs
72 SHAT. SLAB	L	1 Slabs
73 SHRINKAGE CR	N	6 Slabs
74 JOINT SPALL	M	2 Slabs

Sample Number: 13

Sample Type: R
Sample PCI: 28
Sample Area (Slabs): 20

Sample Comments:

62 CORNER BREAK	L	4 Slabs
62 CORNER BREAK	M	2 Slabs
63 LINEAR CR	L	3 Slabs
63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	H	20 Slabs
72 SHAT. SLAB	L	2 Slabs
73 SHRINKAGE CR	N	5 Slabs
74 JOINT SPALL	H	3 Slabs
74 JOINT SPALL	M	2 Slabs

Sample Number: 14

Sample Type: R
Sample PCI: 67
Sample Area (Slabs): 20

Sample Comments:

62 CORNER BREAK	L	1 Slabs
62 CORNER BREAK	M	1 Slabs
63 LINEAR CR	L	3 Slabs
65 JT SEAL DMG	H	20 Slabs
74 JOINT SPALL	M	2 Slabs
75 CORNER SPALL	L	1 Slabs

Sample Number: 17

Sample Type: R
Sample PCI: 56
Sample Area (Slabs): 16

Sample Comments:

63 LINEAR CR	L	3 Slabs
65 JT SEAL DMG	H	16 Slabs
73 SHRINKAGE CR	N	5 Slabs
74 JOINT SPALL	H	3 Slabs

Branch - Section ID: TH02IC - 03

Branch Name: T-HANGAR 02 Use: T-HANGAR

LCD: 10/1/2016
Surface Type: PCC
Rank: P
Section Area (sf): 3,520.00
Length (ft): 88.00
Width (ft): 40.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SE

Slabs: 32
Slab Length (ft): 11.00
Slab Width (ft): 10.00
Joint Length (ft): 544.00

Section Comments:

Last Insp Date: 11/11/2021
PCI: 98
Total Samples: 2
Surveyed: 2

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Branch - Section ID: TH02IC - 04

Branch Name: T-HANGAR 02 Use: T-HANGAR

LCD: 10/1/2012
Surface Type: PCC
Rank: P
Section Area (sf): 5,659.00
Length (ft): 161.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SE

Slabs: 48
Slab Length (ft): 10.00
Slab Width (ft): 11.70
Joint Length (ft): 852.74

Section Comments:

Last Insp Date: 11/11/2021
PCI: 86
Total Samples: 2
Surveyed: 2

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 78
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24	Slabs
71 FAULTING	M	3	Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24	Slabs

RE-INSPECTION REPORT
IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: TH02IC - 05

Branch Name: T-HANGAR 02 Use: T-HANGAR

LCD: 7/1/2017
Surface Type: PCC
Rank: P
Section Area (sf): 6,300.00
Length (ft): 180.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SE

Slabs: 45
Slab Length (ft): 12.00
Slab Width (ft): 11.70
Joint Length (ft): 848.46

Section Comments:

Last Insp Date: 11/11/2021
PCI: 100
Total Samples: 2
Surveyed: 2

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 21

NO DISTRESS

Sample Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 24

NO DISTRESS

Sample Comments:

APPENDIX D

WORK HISTORY REPORT

Work History

Pavement Database: IA 2021

Network: IOWA CITY MUNICIPAL AIRPORT

Branch - Section ID: A01IC - 01

LCD: 6/2/2020
Use: APRON
Rank: P
Surface: PCC

Length (ft): 241.00
Width (ft): 100.00
True Area (sf): 25,168.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2020	CR-PC	Complete Reconstruction - PCC	$250,730.00	8.00	True	8" PCC
06-01-2020	SB-ST	Subbase - Stabilized	$0.00	6.00	False	6" modified subbase
06-01-1945	NC-PC	New Construction - PCC	$0.00	0.00	True	-

Branch - Section ID: A02IC - 01

LCD: 6/1/2007
Use: APRON
Rank: P
Surface: PCC

Length (ft): 240.00
Width (ft): 192.00
True Area (sf): 44,939.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2007	SU-PC	Surface Course - PCC	$0.00	0.00	True	ESTIMATED DATE
06-01-1965	OL-AS	Overlay - AC Structural	$0.00	0.00	True	-

Branch - Section ID: A02IC - 02

LCD: 7/1/2016
Use: APRON
Rank: P
Surface: PCC

Length (ft): 240.00
Width (ft): 96.00
True Area (sf): 22,470.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
07-01-2016	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

Branch - Section ID: R07IC - 01

LCD: 4/3/2009
Use: RUNWAY
Rank: P
Surface: PCC

Length (ft): 2,430.00
Width (ft): 100.00
True Area (sf): 243,002.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
04-03-2009	CR-PC	Complete Reconstruction - PCC	$0.00	8.00	True	8" P501 PCC SURFA E
04-02-2009	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P219 RECYCLED CONCRETE
04-01-2009	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" P152 COMPACTED SUBGRADE
06-01-1940	NC-PC	New Construction - PCC	$0.00	0.00	True	7.5"-5"-7.5" PCC

Work History

Pavement Database: IA 2021

Branch - Section ID: R07IC - 02

LCD: 10/3/2009
Use: RUNWAY
Rank: P
Surface: PCC

Length (ft): 1,939.00
Width (ft): 100.00
True Area (sf): 193,887.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-03-2009	CR-PC	Complete Reconstruction - PCC	$0.00	8.00	True	8" P501 PCC SURFACE
10-02-2009	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P219 RECYCLED CONCRETE
10-01-2009	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" P152 COMPACTED SUBGRADE
06-01-1940	NC-PC	New Construction - PCC	$0.00	0.00	True	7.5"-5"-7.5" PCC

Branch - Section ID: R07IC - 03

LCD: 10/2/2008
Use: RUNWAY
Rank: P
Surface: PCC

Length (ft): 773.00
Width (ft): 100.00
True Area (sf): 77,286.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-02-2008	CR-PC	Complete Reconstruction - PCC	$0.00	8.00	True	8" P501 PCC
10-01-2008	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P208 ABC

Branch - Section ID: R12IC - 01

LCD: 10/3/2009
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 3,770.00
Width (ft): 100.00
True Area (sf): 283,221.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-03-2009	CR-PC	Complete Reconstruction - PCC	$0.00	6.00	True	6" P501 PCC
10-02-2009	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P219 RECYCLED CONCRETE
10-01-2009	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P152 COMPACTED SUBGRADE
06-02-1946	NC-PC	New Construction - PCC	$0.00	9.00	True	350' EXTENSION @ 12 APPROACH: 9" PCC
06-01-1946	SB-AG	Subbase - Aggregate	$0.00	7.00	False	350' EXTENSION @ 12 APPROACH: 7" P154
06-01-1940	NC-PC	New Construction - PCC	$0.00	0.00	True	7.5"-5"-7.5" PCC

Branch - Section ID: T01IC - 01

LCD: 6/1/2013
Use: TAXIWAY
Rank: P
Surface: APC

Length (ft): 650.00
Width (ft): 50.00
True Area (sf): 32,101.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2013	OL-AC	Overlay - AC	$0.00	2.00	True	-
06-02-1945	NC-PC	New Construction - PCC	$0.00	9.00	True	-

Work History

Pavement Database: IA 2021

Branch - Section ID: T01IC - 02

LCD: 6/2/2020
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 330.00
Width (ft): 50.00
True Area (sf): 16,542.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2020	CR-PC	Complete Reconstruction - PCC	$165,420.00	8.00	True	8" PCC
06-01-2020	SB-ST	Subbase - Stabilized	$0.00	6.00	False	6" modified subbase
06-01-2012	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
01-01-1945	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T01IC - 04

LCD: 6/1/2013
Use: TAXIWAY
Rank: P
Surface: APC

Length (ft): 200.00
Width (ft): 50.00
True Area (sf): 10,326.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2013	OL-AC	Overlay - AC	$0.00	2.00	True	-
06-02-1945	NC-PC	New Construction - PCC	$0.00	9.00	True	-

Branch - Section ID: T01IC - 05

LCD: 6/3/2012
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 520.00
Width (ft): 50.00
True Area (sf): 26,020.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2012	CR-PC	Complete Reconstruction - PCC	$0.00	8.00	True	-
06-02-2012	BA-AG	Base Course - Aggregate	$0.00	6.00	False	-
06-01-2012	SG-ST	Subgrade - Stabilized	$0.00	12.00	False	Flyash stabilized
09-01-2010	OL-AS	Overlay - AC Structural	$0.00	0.00	True	-
06-01-1965	NC-AC	New Construction - AC	$0.00	0.00	True	Assumed

Branch - Section ID: T01IC - 06

LCD: 10/15/2009
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 250.00
Width (ft): 50.00
True Area (sf): 12,680.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-15-2009	NU-IN	New Construction - Initial	$0.00	6.00	True	AIP 3-19-0047-17, -18, & -19
10-14-2009	BA-AG	Base Course - Aggregate	$0.00	5.00	False	RECYCLED PCC AS AGG
10-13-2009	SG-CO	Subgrade - Compacted	$0.00	6.00	False	LVC

Work History

Pavement Database: IA 2021

Branch - Section ID: T02IC - 01

LCD: 10/15/2008
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 275.00
Width (ft): 35.00
True Area (sf): 10,933.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-15-2008	NU-IN	New Construction - Initial	$0.00	0.00	True	AIP Project
10-14-2008	BA-AG	Base Course - Aggregate	$0.00	0.00	False	RECYCLED PCC AS AGG
10-13-2008	SG-CO	Subgrade - Compacted	$0.00	0.00	False	P152 COMPACTED SUBGRADE

Branch - Section ID: T02IC - 02

LCD: 6/3/2012
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 5,400.00
Width (ft): 35.00
True Area (sf): 197,985.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2012	NC-PC	New Construction - PCC	$0.00	8.00	True	-
06-02-2012	BA-AG	Base Course - Aggregate	$0.00	6.00	False	-
06-01-2012	SG-ST	Subgrade - Stabilized	$0.00	12.00	False	Flyash stabilized

Branch - Section ID: TH01IC - 01

LCD: 6/3/2012
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 215.00
Width (ft): 40.00
True Area (sf): 8,500.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2012	NC-PC	New Construction - PCC	$0.00	8.00	True	-
06-02-2012	BA-AG	Base Course - Aggregate	$0.00	6.00	False	-
06-01-2012	SG-ST	Subgrade - Stabilized	$0.00	12.00	False	Flyash stabilized

Branch - Section ID: TH01IC - 02

LCD: 7/1/2009
Use: T-HANGAR
Rank: P
Surface: APC

Length (ft): 285.00
Width (ft): 35.00
True Area (sf): 9,559.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
07-01-2009	OL-AC	Overlay - AC	$0.00	0.00	True	EST. VIA GE
01-01-1940	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

Branch - Section ID: TH01IC - 03

LCD: 1/1/1945
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 120.00
Width (ft): 90.00
True Area (sf): 8,161.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-1945	NC-PC	New Construction - PCC	$0.00	0.00	True	DATE UNKNOWN

Work History

Pavement Database: IA 2021

Branch - Section ID: TH01IC - 04

LCD: 7/1/2009
Use: T-HANGAR
Rank: P
Surface: AAC

Length (ft): 1,420.00
Width (ft): 25.00
True Area (sf): 83,972.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
07-01-2009	OL-AC	Overlay - AC	$0.00	0.00	True	EST. VIA GE

Branch - Section ID: TH02IC - 01

LCD: 1/1/2007
Use: T-HANGAR
Rank: P
Surface: AAC

Length (ft): 590.00
Width (ft): 35.00
True Area (sf): 20,650.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2007	OL-AC	Overlay - AC	$0.00	0.00	True	EST. VIA GE

Branch - Section ID: TH02IC - 02

LCD: 1/1/2000
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 1,230.00
Width (ft): 35.00
True Area (sf): 53,361.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2000	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

Branch - Section ID: TH02IC - 03

LCD: 10/1/2016
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 88.00
Width (ft): 40.00
True Area (sf): 3,520.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-01-2016	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

Branch - Section ID: TH02IC - 04

LCD: 10/1/2012
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 161.00
Width (ft): 35.00
True Area (sf): 5,659.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-01-2012	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

Work History

Pavement Database: IA 2021

Branch - Section ID: TH02IC - 05

LCD: 7/1/2017
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 180.00
Width (ft): 35.00
True Area (sf): 6,300.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
07-01-2017	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

APPENDIX E

LOCALIZED PREVENTIVE MAINTENANCE POLICIES AND UNIT COST TABLES

Table E-1. Localized preventive maintenance policy, asphalt-surfaced pavements.

Distress Type	Severity Level	Maintenance Action
Alligator Cracking	Low	Monitor
Alligator Cracking	Medium	Asphalt Patch
Alligator Cracking	High	Asphalt Patch
Bleeding	N/A	Monitor
Block Cracking	Low	Monitor
Block Cracking	Medium	Crack Seal—Asphalt
Block Cracking	High	Crack Seal—Asphalt
Corrugation	Low	Monitor
Corrugation	Medium	Asphalt Patch
Corrugation	High	Asphalt Patch
Depression	Low	Monitor
Depression	Medium	Monitor
Depression	High	Asphalt Patch
Jet-Blast Erosion	N/A	Asphalt Patch
Joint Reflection Cracking	Low	Monitor
Joint Reflection Cracking	Medium	Crack Seal—Asphalt
Joint Reflection Cracking	High	Crack Seal—Asphalt
L&T Cracking	Low	Monitor
L&T Cracking	Medium	Crack Seal—Asphalt
L&T Cracking	High	Crack Seal—Asphalt
Oil Spillage	N/A	Asphalt Patch
Patching	Low	Monitor
Patching	Medium	Asphalt Patch
Patching	High	Asphalt Patch
Polished Aggregate	N/A	Monitor
Raveling	Low	Monitor
Raveling	Medium	Asphalt Patch
Raveling	High	Asphalt Patch
Rutting	Low	Monitor
Rutting	Medium	Monitor
Rutting	High	Asphalt Patch
Shoving	Low	Monitor
Shoving	Medium	Asphalt Patch
Shoving	High	Asphalt Patch
Slippage Cracking	N/A	Asphalt Patch
Swelling	Low	Monitor
Swelling	Medium	Monitor
Swelling	High	Asphalt Patch
Weathering	Low	Monitor
Weathering	Medium	Monitor
Weathering	High	Asphalt Patch

Table E-2. Localized preventive maintenance policy, PCC pavements.

Distress Type	Severity Level	Maintenance Action
ASR	Low	Monitor
ASR	Medium	Slab Replacement
ASR	High	Slab Replacement
Blowup	Low	Slab Replacement
Blowup	Medium	Slab Replacement
Blowup	High	Slab Replacement
Corner Break	Low	Crack Seal—PCC
Corner Break	Medium	Full Depth PCC Patch
Corner Break	High	Full Depth PCC Patch
Durability Cracking	Low	Monitor
Durability Cracking	Medium	Full Depth Patch
Durability Cracking	High	Slab Replacement
Faulting	Low	Monitor
Faulting	Medium	Grinding
Faulting	High	Slab Replacement
Joint Seal Damage	Low	Monitor
Joint Seal Damage	Medium	Joint Seal
Joint Seal Damage	High	Joint Seal
LTD Cracking	Low	Monitor
LTD Cracking	Medium	Crack Seal—PCC
LTD Cracking	High	Slab Replacement
Patching (Small and Large)	Low	Monitor
Patching (Small and Large)	Medium	Full Depth PCC Patch
Patching (Small and Large)	High	Full Depth PCC Patch
Popouts	N/A	Monitor
Pumping	N/A	Monitor
Scaling	Low	Monitor
Scaling	Medium	Partial Depth PCC Patch
Scaling	High	Slab Replacement
Shattered Slab	Low	Crack Seal—PCC
Shattered Slab	Medium	Slab Replacement
Shattered Slab	High	Slab Replacement
Shrinkage Cracking	N/A	Monitor
Spalling (Joint and Corner)	Low	Monitor
Spalling (Joint and Corner)	Medium	Partial Depth PCC Patch
Spalling (Joint and Corner)	High	Partial Depth PCC Patch

Table E-3. 2022 unit costs for preventive maintenance actions.

Maintenance Action	Unit Cost
Asphalt Patch—Asphalt-Surfaced Pavement	$14.66/sf
Crack Sealing—Asphalt-Surfaced Pavement	$2.51/lf
Partial Depth PCC Patch—PCC Pavement	$37.54/sf
Full Depth PCC Patch—PCC Pavement	$16.76/sf
Crack Sealing—PCC Pavement	$3.02/lf
Joint Sealing—PCC Pavement	$3.02/lf
Grinding—PCC Pavement	$0.36/sf
Slab Replacement—PCC Pavement	$16.76/sf

Table E-4. 2022 unit costs (per square foot) based on pavement type and PCI ranges.

Pavement Type	PCI Range 0–40	PCI Range 40–50	PCI Range 50–60	PCI Range 60–70	PCI Range 70–80	PCI Range 80–90	PCI Range 90–100
AC	$10.41	$4.93	$4.93	$4.93	$0.00	$0.00	$0.00
PCC	$17.38	$8.22	$8.22	$8.22	$0.00	$0.00	$0.00

APPENDIX F

YEAR 2022 LOCALIZED PREVENTIVE MAINTENANCE DETAILS

Table F-1. Year 2022 localized preventive maintenance details.

Branch	Section	Distress Type	Severity	Distress Quantity	Distress Unit	Maintenance Action	Unit Cost	2022 Estimated Cost
R07IC	01	Joint Seal Damage	Medium	160	Slabs	Joint Seal (Localized)	$3.02	$12,306
R07IC	01	LTD Cracking	Medium	24	Slabs	Crack Sealing - PCC	$3.02	$993
R07IC	01	Small Patch	Medium	2	Slabs	Patching - PCC Full Depth	$16.76	$90
R07IC	02	Joint Seal Damage	Medium	129	Slabs	Joint Seal (Localized)	$3.02	$9,965
R07IC	03	Joint Seal Damage	Medium	59	Slabs	Joint Seal (Localized)	$3.02	$4,514
R12IC	01	Joint Seal Damage	Medium	201	Slabs	Joint Seal (Localized)	$3.02	$14,230
R12IC	01	Joint Spalling	Medium	8	Slabs	Patching - PCC Partial Depth	$37.54	$2,035
T01IC	06	ASR	Medium	1	Slabs	Slab Replacement - PCC	$16.76	$3,170
T01IC	06	Corner Spalling	High	1	Slabs	Patching - PCC Partial Depth	$37.54	$133
T02IC	02	LTD Cracking	Medium	1	Slabs	Crack Sealing - PCC	$3.02	$30
TH02IC	04	Faulting	Medium	3	Slabs	Grinding (Localized)	$0.36	$13
TH02IC	04	Joint Seal Damage	Medium	48	Slabs	Joint Seal (Localized)	$3.02	$2,575

Table Notes:

1. See Figure 3 for the location of the branch and section.
2. Distress types are defined by ASTM D5340-20. L&T Cracking = Longitudinal and Transverse Cracking; LTD Cracking = Longitudinal, Transverse, and Diagonal Cracking; ASR = Alkali-Silica Reaction.
3. The costs provided are of a general nature for the entire state and may require adjustment to reflect specific conditions at Iowa City Municipal Airport.

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