Southeast Iowa Regional Airport

PAVEMENT MANAGEMENT REPORT

PREPARED BY

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applied pavement TECHNOLOGY

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SOUTHEAST IOWA REGIONAL AIRPORT
PAVEMENT MANAGEMENT REPORT

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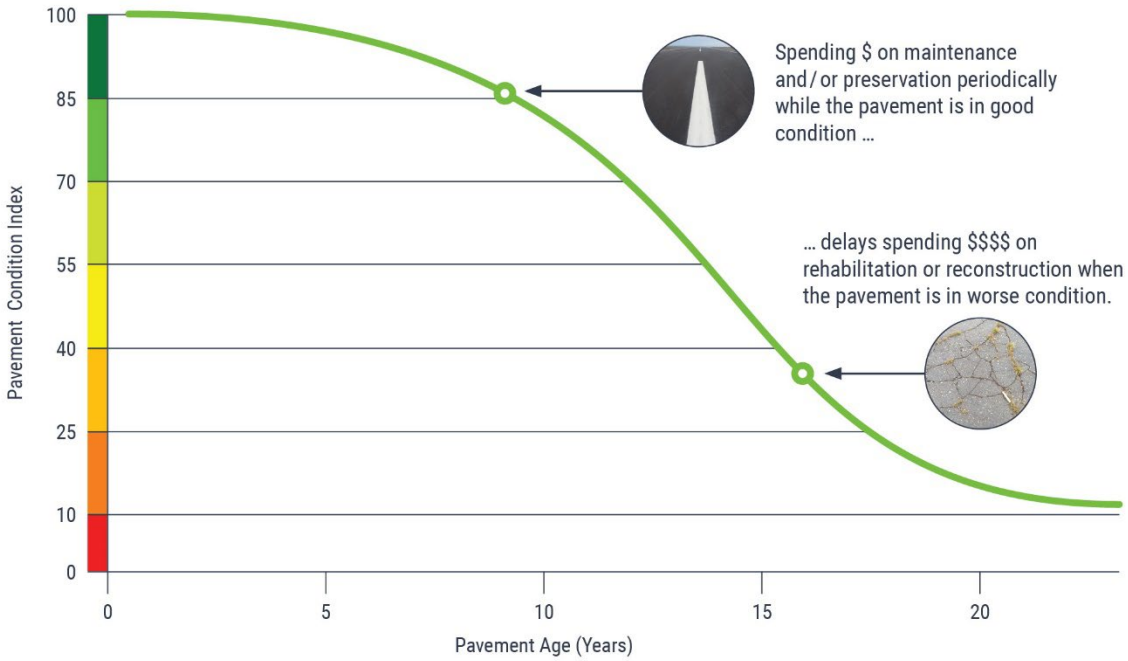
INTRODUCTION

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 Southeast Iowa Regional 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 Southeast Iowa Regional Airport are presented within this report and can be used by Southeast Iowa Regional 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 Southeast Iowa Regional 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 Southeast Iowa Regional 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 2,224,900 square feet of pavement were evaluated at Southeast Iowa Regional 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 Southeast Iowa Regional Airport.

Figure 2. Pavement area by branch use at Southeast Iowa Regional Airport.

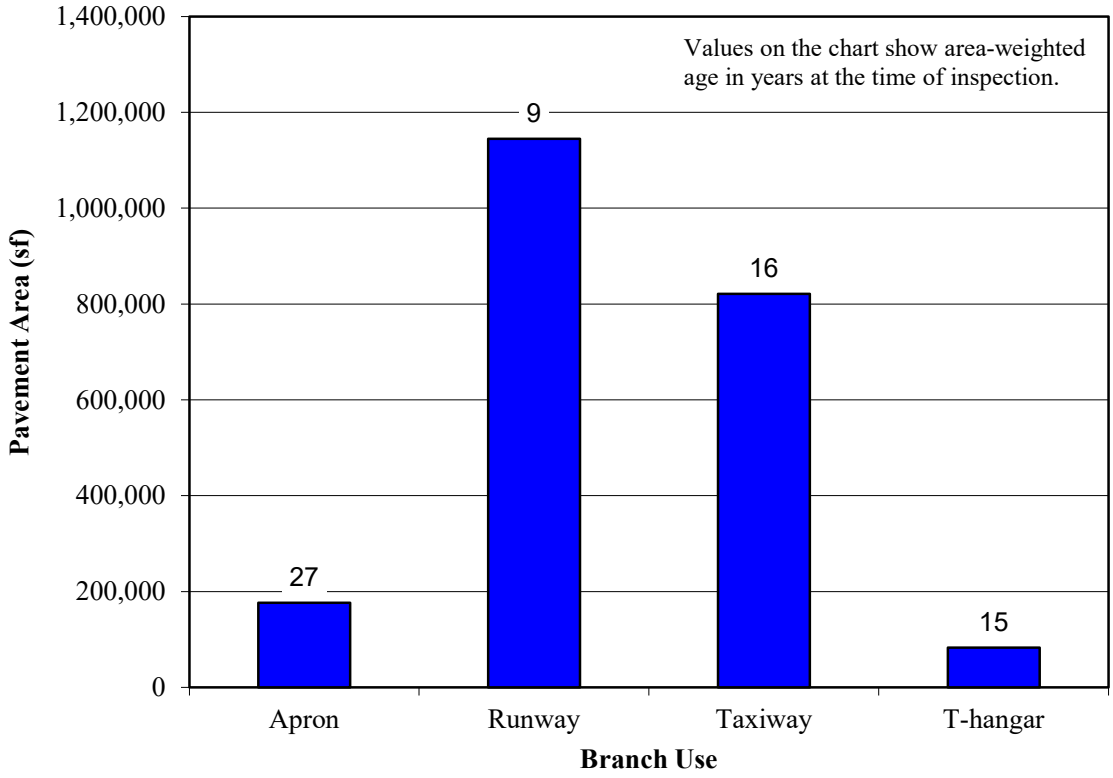
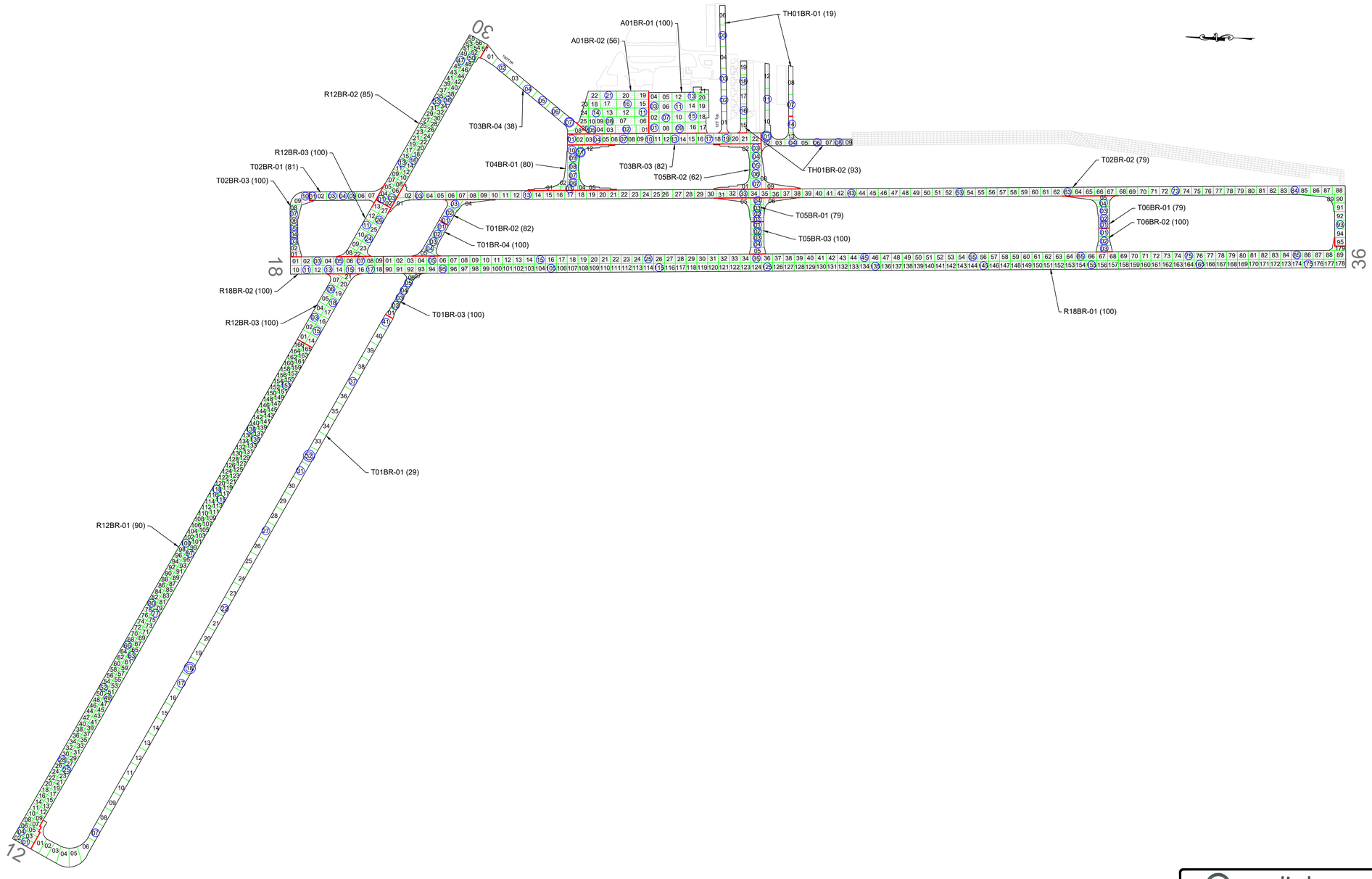


FIGURE 3. NETWORK DEFINITION MAP.



NETWORK DEFINITION LEGEND

R18AN-10 (78)
- 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: Southeast Iowa Regional Airport, Burlington, Iowa			
PAGE TITLE: Network Definition Map			
PROJECT DATE: SEP. 2021	CREATION DATE: SEP. 2021	PROJECT MANAGER: LJR	JOB NUMBER: 17-020-AM05
DRAWING SCALE: 1"=300'	LAST MODIFIED DATE: JAN. 2022	REVISED BY: KEW	DRAWN BY: DSP
FILENAME: Burlington.dwg		LAYOUT NAME/NUMBER: NET. DEF.	PAGE NUMBER: 5

PAVEMENT EVALUATION

Pavement Evaluation Procedure

APTech inspected the pavements at Southeast Iowa Regional 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.

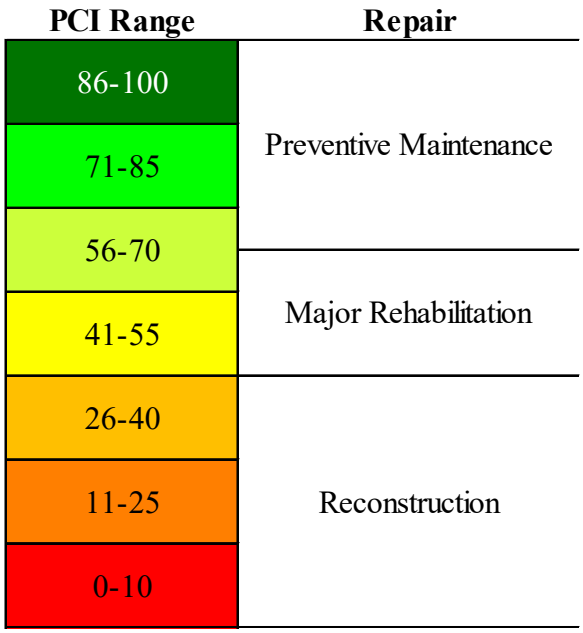
Figure 4. Visual representation of PCI scale on typical pavement surfaces[1].

PCI = 100 PCI = 60 PCI = 35

[1]Photographs shown are not specific to Southeast Iowa Regional 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 Southeast Iowa Regional Airport were inspected in November 2021. The 2021 area-weighted condition of Southeast Iowa Regional Airport is 82, with conditions ranging from 19 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 64.

Figure 6 summarizes the overall condition of the pavements at Southeast Iowa Regional 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 Southeast Iowa Regional Airport.

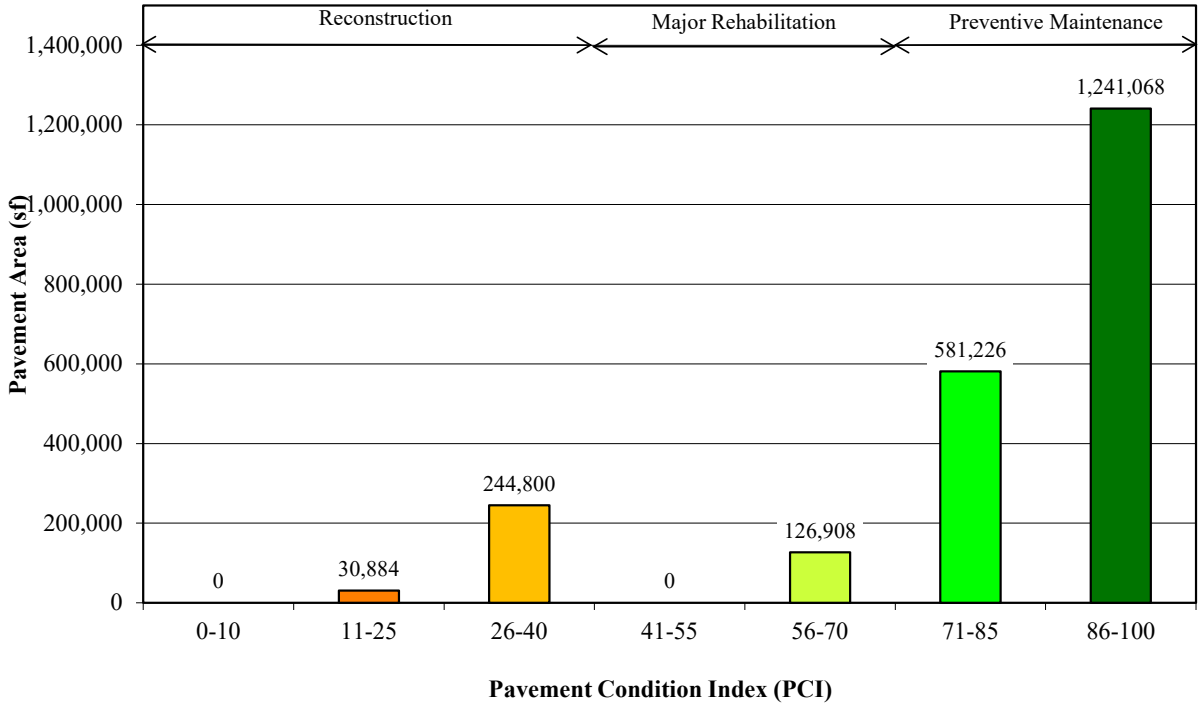


Figure 7. Area-weighted PCI by branch use at Southeast Iowa Regional Airport.
(Values on chart are area-weighted)

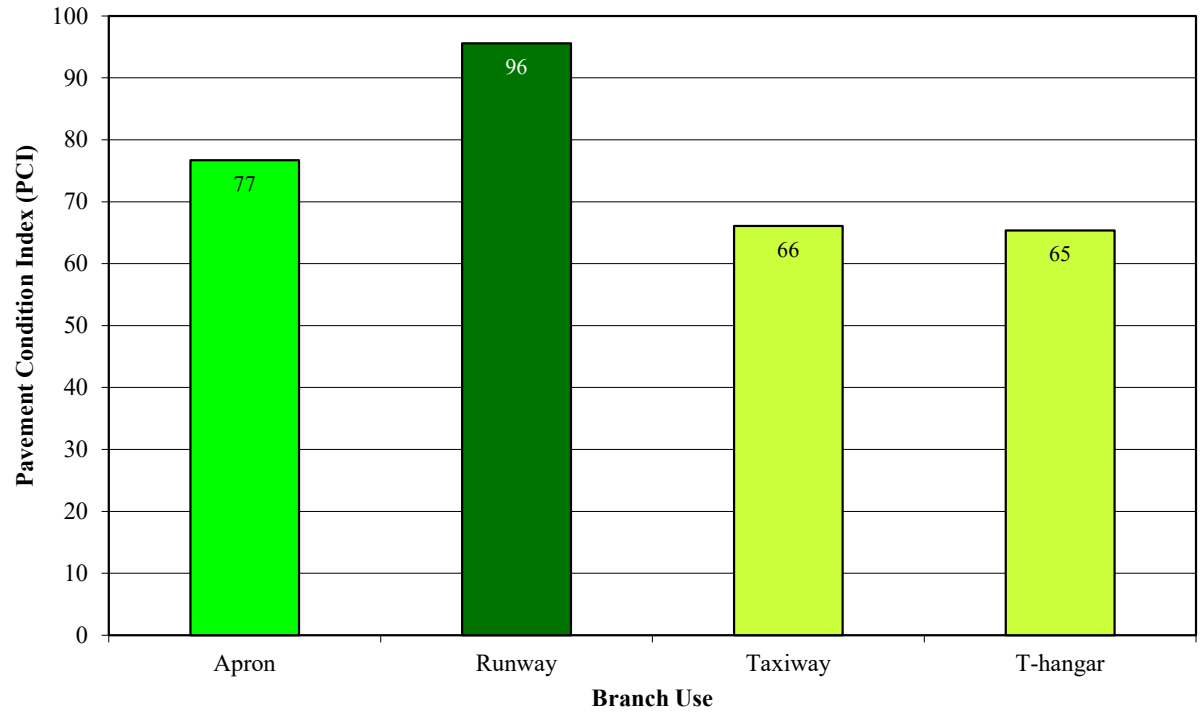
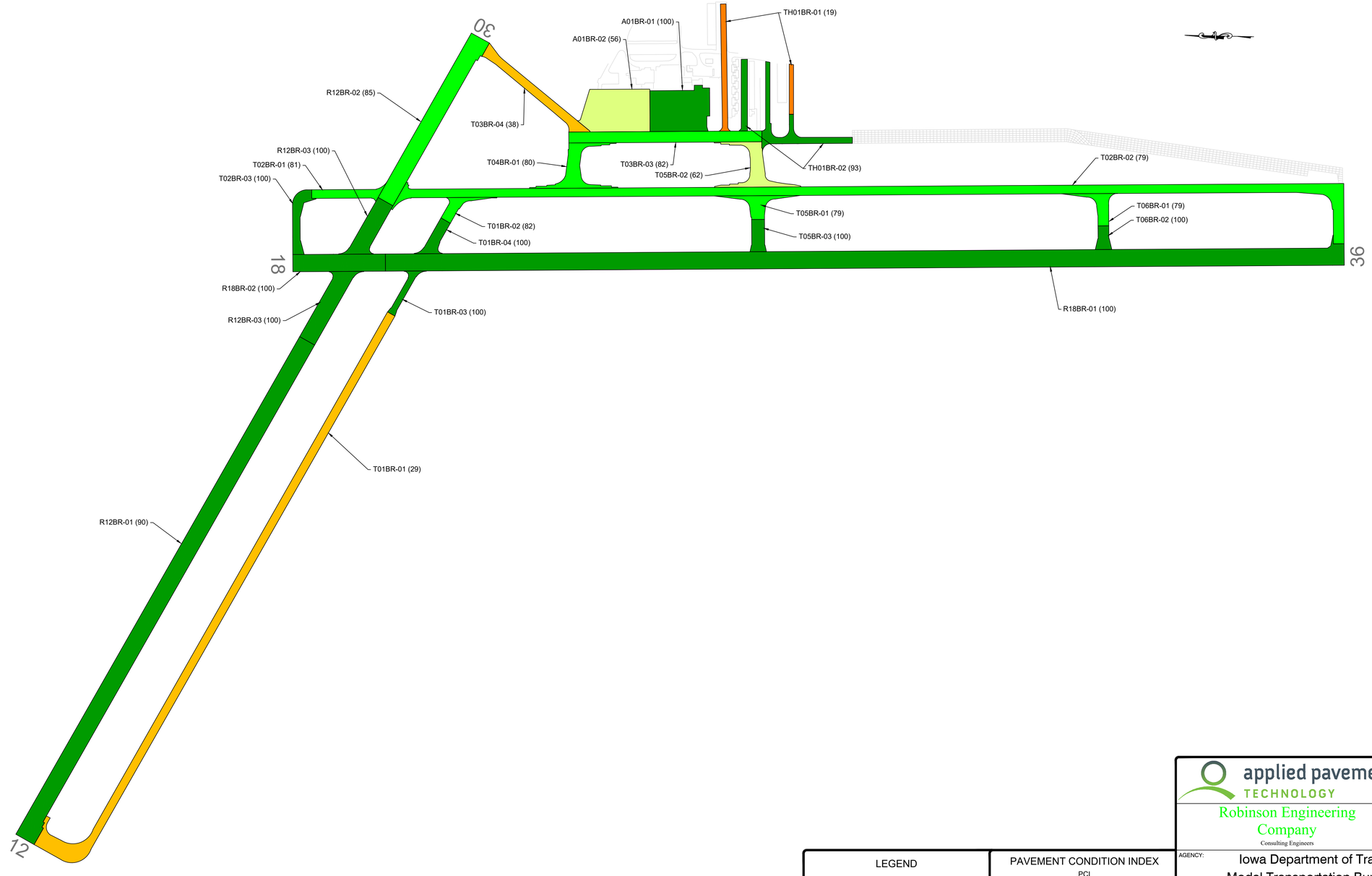


FIGURE 8. PCI MAP.



LEGEND

BRANCH IDENTIFIER
SECTION IDENTIFIER
PCI VALUE
R18AN-10 (78)

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: Southeast Iowa Regional Airport
Burlington, Iowa

PAGE TITLE: 2021 Pavement Condition Index Map

PROJECT DATE:	CREATION DATE:	PROJECT MANAGER:	JOB NUMBER:
SEP. 2021	SEP. 2021	LJR	17-020-AM05
DRAWING SCALE:	LAST MODIFIED DATE:	REVISED BY:	DRAWN BY:
1"=300'	APR. 2022	DSP	DSP
FILENAME:		LAYOUT NAME/NUMBER:	PAGE NUMBER:
Burlington.dwg		PCI	9

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
A01BR	01	PCC	83,062	5/14/2016	100	0	0	0	No Distresses
A01BR	02	PCC	93,343	6/30/1974	56	42	15	43	ASR, Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shattered Slab, Small Patch
R12BR	01	PCC	337,736	6/1/1998	90	4	70	26	ASR, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, LTD Cracking, Shrinkage Cracking
R12BR	02	PCC	111,118	6/1/1998	85	0	73	27	ASR, Corner Spalling, Faulting, Joint Seal Damage, Small Patch
R12BR	03	PCC	83,250	6/3/2021	100	0	0	0	No Distresses
R18BR	01	PCC	558,770	6/3/2021	100	0	0	0	No Distresses
R18BR	02	PCC	53,735	6/3/2021	100	0	0	0	No Distresses
T01BR	01	APC	205,140	6/1/2005	29	7	75	18	Alligator Cracking, Bleeding, Block Cracking, Joint Reflection Cracking, L&T Cracking, Patching, Raveling, Swelling, Weathering
T01BR	02	PCC	12,890	1/1/2003	82	0	66	34	Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, Small Patch
T01BR	03	PCC	11,350	6/3/2021	100	0	0	0	No Distresses
T01BR	04	PCC	15,250	6/3/2021	100	0	0	0	No Distresses
T02BR	01	PCC	20,640	1/1/2003	81	61	33	6	ASR, Corner Break, Joint Seal Damage, LTD Cracking
T02BR	02	PCC	298,130	1/1/2003	79	8	47	45	ASR, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch
T02BR	03	PCC	21,785	6/3/2021	100	0	0	0	No Distresses

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
T03BR	03	PCC	70,854	1/1/2003	82	17	62	21	ASR, Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, LTD Cracking, Small Patch
T03BR	04	APC	39,660	6/1/2005	38	26	74	0	Alligator Cracking, Block Cracking, Joint Reflection Cracking, Patching, Raveling, Weathering
T04BR	01	PCC	32,954	1/1/2003	80	2	41	57	ASR, Corner Break, Corner Spalling, Joint Seal Damage, Large Patch, Small Patch
T05BR	01	PCC	18,395	1/1/2003	79	0	51	49	ASR, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, Shrinkage Cracking, Small Patch
T05BR	02	PCC	33,565	1/1/2003	62	0	32	68	ASR, Corner Spalling, Joint Spalling, Joint Seal Damage, Shrinkage Cracking, Small Patch
T05BR	03	PCC	14,510	6/3/2021	100	0	0	0	No Distresses
T06BR	01	PCC	16,245	1/1/2003	79	0	40	60	ASR, Corner Spalling, Joint Spalling, Joint Seal Damage, Small Patch
T06BR	02	PCC	9,770	6/3/2021	100	0	0	0	No Distresses
TH01BR	01	AC	30,884	7/3/1995	19	28	70	2	Alligator Cracking, Bleeding, L&T Cracking, Patching, Raveling, Rutting, Swelling
TH01BR	02	PCC	51,850	8/3/2012	93	35	61	4	Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shattered Slab

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.

Table 1. 2021 pavement evaluation results (continued).

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

Southeast Iowa Regional Airport was inspected on November 22, 2021. There were twenty-four pavement sections defined during the inspection. Suspected alkali-silica reaction (ASR) was recorded at this airport 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.

Runways

Runway 12/30 consisted of three sections. Section 01 contained all severities of joint seal damage. In addition, low- and medium-severity faulting; shrinkage cracking; high-severity joint spalling; and low-severity corner spalling, ASR, and longitudinal, transverse, and diagonal (LTD) cracking were recorded. Low- and medium-severity corner spalling; high-severity joint seal damage; and low-severity small patching, ASR, and faulting were observed in Section 02. Section 03 was located near the intersection of the two runways and had been recently reconstructed. This section was in excellent condition with no distress identified during the inspection.

Runway 18/36 was defined by two, recently reconstructed sections that were in excellent condition. No distress was noted in either section at the time of inspection.

Taxiways

Taxiway 01, the parallel taxiway for Runway 12/30, contained four sections. Section 01 was in poor condition with high-severity alligator cracking; bleeding; low- and medium-severity block cracking, joint reflection cracking, raveling, and longitudinal and transverse (L&T) cracking; low-severity patching and weathering; and all severities of swelling observed throughout. The low-severity cracking was both sealed and unsealed, while the medium-severity cracking was recorded where either unsealed crack widths exceeded ¼ in or where crack sealant was unsatisfactory. Two atypical areas of high-severity raveling were identified and recorded as additional sample units, in accordance with ASTM D5340-20. Areas of medium-severity corner spalling and joint spalling, low-severity faulting and large patching, medium- and high-severity joint seal damage, and low- and medium-severity small patching were recorded in Section 02. Sections 03 and 04 were in excellent condition, with no distress noted at the time of inspection.

Taxiway 02 served as the parallel taxiway for Runway 18/36 and consisted of three sections. Section 01 contained low-severity ASR and low- and medium-severity corner break, joint seal damage, and LTD cracking. Low- and medium-severity ASR, large patching, and LTD cracking; medium- and high-severity corner spalling; low-severity faulting and small patching; high-severity joint spalling; and all severities of joint seal damage were noted in Section 02. Section 03 was excellent condition with no distress identified during the inspection.

Taxiway 03, which connects the Runway 30 approach with the apron and T-Hangar areas, was defined by two sections. In Section 03, low-severity ASR, corner break, and small patching; medium- and high-severity corner spalling; all severities of joint seal damage; medium-severity joint spalling; and low- and medium-severity LTD cracking were recorded. Section 04 was in poor condition with medium-severity alligator cracking; low- and medium-severity raveling; and low-severity block cracking, joint reflection cracking, and weathering observed throughout. The

low-severity cracking was both sealed and unsealed. An atypical area with low-severity patching was recorded as an additional sample unit, in accordance with ASTM D5340-20.

Taxiway 04 consisted of one section. All severities of small patching, low-severity ASR and corner break, medium-severity corner spalling and large patching, and low- and high-severity joint seal damage were recorded in Section 01. An area with medium- and high-severity ASR was recorded as an additional sample unit, in accordance with ASTM D5340-20.

Taxiway 05 was defined by three sections. Section 01 contained low-severity ASR, large patching, and faulting; low- and medium-severity joint spalling; medium- and high-severity joint seal damage; shrinkage cracking; and low- and high-severity small patching. Areas of low- and medium-severity ASR and corner spalling, medium-severity joint spalling, medium- and high-severity joint seal damage, shrinkage cracking, and low-severity small patching were observed in Section 02. Section 03 was in excellent condition with no distress noted at the time of inspection.

Taxiway 06 contained two sections. Section 01 contained low-severity ASR and small patching, low- and medium-severity corner spalling, medium-severity joint spalling, and low- and high-severity joint seal damage. Section 02 was in excellent condition with no distress recorded during the inspection.

Apron

The apron area was defined by two sections. Section 01 is in excellent condition with no distress identified at the time of inspection. Low- and medium-severity LTD cracking, shattered slab, joint spalling, and corner spalling; medium-severity corner break; all severities of ASR; high-severity small patching and joint seal damage; and low-severity large patching were recorded in Section 02.

T-Hangar

The T-hangar area consisted of two sections. Section 01 was in poor condition with low- and medium-severity alligator cracking and L&T cracking; bleeding; low-severity patching, swelling, and rutting; and high-severity raveling noted throughout. The low-severity L&T cracking was unsealed and the medium-severity L&T cracking was due to either the development of secondary cracking or to unsealed crack widths greater than ¼ in. Medium-severity joint spalling, all severities of joint seal damage, and low-severity LTD cracking and large patching were identified in Section 02. An atypical area that contained high-severity shattered slab was recorded as an additional sample unit, in accordance with ASTM D5340-20.

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 Southeast Iowa Regional 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 Southeast Iowa Regional 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 Southeast Iowa Regional 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 Southeast Iowa Regional 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	R12BR	01	PCC	Preventive Maintenance	$114,175
2022	R12BR	02	PCC	Preventive Maintenance	$64,857
2022	T01BR	01	APC	Major Rehabilitation	$2,136,416
2022	T01BR	02	PCC	Preventive Maintenance	$5,999
2022	T02BR	01	PCC	Preventive Maintenance	$7,873
2022	T02BR	02	PCC	Preventive Maintenance	$181,175
2022	T03BR	03	PCC	Preventive Maintenance	$26,243
2022	T03BR	04	APC	Major Rehabilitation	$413,036
2022	T04BR	01	PCC	Preventive Maintenance	$19,344
2022	T05BR	01	PCC	Preventive Maintenance	$8,580
2022	T06BR	01	PCC	Preventive Maintenance	$4,421
2022	TH01BR	01	AC	Major Rehabilitation	$321,639
2022	TH01BR	02	PCC	Preventive Maintenance	$13,042
2023	A01BR	02	PCC	Major Rehabilitation	$798,157
2024	T05BR	02	PCC	Major Rehabilitation	$298,488
				Total Estimated Cost:	**$4,413,000**

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 Southeast Iowa Regional Airport.

The recommendations made in this report are based on a broad network-level analysis and meant to provide Southeast Iowa Regional 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 Southeast Iowa Regional 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, Southeast Iowa Regional 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 Southeast Iowa Regional 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, Southeast Iowa Regional 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 Southeast Iowa Regional 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 Southeast Iowa Regional 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 Southeast Iowa Regional 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
A01BR	01					
A01BR	02					
R12BR	01					
R12BR	02					
R12BR	03					
R18BR	01					

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
R18BR	02					
T01BR	01					
T01BR	02					
T01BR	03					
T01BR	04					
T02BR	01					

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
T02BR	02					
T02BR	03					
T03BR	03					
T03BR	04					
T04BR	01					
T05BR	01					

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
T05BR	02					
T05BR	03					
T06BR	01					
T06BR	02					
TH01BR	01					
TH01BR	02					

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 Southeast Iowa Regional Airport. A visual inspection of the pavements in 2021 found that the overall condition of the pavement network is a PCI of 82. A 5-year pavement repair program, shown in Table 2, was generated for Southeast Iowa Regional Airport, which revealed that approximately $4,413,000 needs to be expended on M&R. Southeast Iowa Regional 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

A01BR-01. Overview.

A01BR-02. Overview.

A01BR-02. ASR (Sample Unit No. 02).

A01BR-02. LTD Cracking (Sample Unit No. 05).

R12BR-01. Overview.

R12BR-01. ASR (Sample Unit No. 138).

R12BR-01. Joint Seal Damage (Sample Unit No. 153).

R12BR-02. Overview.

R12BR-02. ASR (Sample Unit No. 13).

R12BR-03. Overview.

R18BR-01. Overview.

R18BR-02. Overview.

T01BR-01. Overview.

T01BR-01. Block Cracking (Sample Unit No. 27).

T01BR-02. Overview.

T01BR-02. Small Patching (Sample Unit No. 02).

T01BR-03. Overview.

T01BR-04. Overview.

T02BR-01. Overview.

T02BR-01. LTD Cracking (Sample Unit No. 01).

T02BR-02. Overview.

T02BR-02. Corner Spalling (Sample Unit No. 63).

T02BR-03. Overview.

T03BR-03. Overview.

T03BR-03. Joint Seal Damage (Sample Unit No. 10).

T03BR-03. LTD Cracking (Sample Unit No. 04).

T03BR-04. Overview.

T03BR-04. Block Cracking (Sample Unit No. 02).

T03BR-04. Raveling (Sample Unit No. 02).

T04BR-01. Overview.

T04BR-01. ASR (Additional Sample Unit No. 11).

T04BR-01. Small Patching (Sample Unit No. 08).

T05BR-01. Overview.

T05BR-01. ASR (Sample Unit No. 03).

T05BR-02. Overview.

T05BR-02. ASR (Sample Unit No. 03).

T05BR-03. Overview.

T06BR-01. Overview.

T06BR-01. Corner Spalling (Sample Unit No. 04).

T06BR-02. Overview.

TH01BR-01. Overview.

TH01BR-01. Raveling (Sample Unit No. 02).

TH01BR-02. Overview.

TH01BR-02. Large Patching (Sample Unit No. 14).

TH01BR-02. Shattered Slab (Additional Sample Unit No. 01).

APPENDIX C

INSPECTION REPORT

RE-INSPECTION REPORT
SOUTHEAST IOWA REGIONAL AIRPORT

Branch - Section ID: A01BR - 01

Branch Name: APRON Use: APRON

LCD: 5/14/2016
Surface Type: PCC
Rank: P
Section Area (sf): 83,062.00
Length (ft): 320.00
Width (ft): 238.00
From: S. END OF APRON
To: TERMINAL AREA

PCI Family: IowaPCCAPSE_CommEnhanced

Slabs: 341
Slab Length (ft): 19.50
Slab Width (ft): 12.50
Joint Length (ft): 10,295.98

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 21
Surveyed: 7

Inspection Comments:

Sample Number: 01

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: 07

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

Sample Comments:

NO DISTRESS

Sample Number: 09

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

Sample Comments:

NO DISTRESS

Sample Number: 11

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

Sample Comments:

NO DISTRESS

Sample Number: 13

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

Sample Comments:

NO DISTRESS

Sample Number: 15

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

NO DISTRESS

Sample Comments:

RE-INSPECTION REPORT
SOUTHEAST IOWA REGIONAL AIRPORT

Branch - Section ID: A01BR - 02

Branch Name: APRON Use: APRON

LCD: 6/30/1974
Surface Type: PCC
Rank: P
Section Area (sf): 93,343.00
Length (ft): 380.00
Width (ft): 250.00
From: NORTH END OF APRON
To: TAXIWAY D

PCI Family: IowaPCCAPSE_CommEnhanced

Slabs: 383
Slab Length (ft): 19.50
Slab Width (ft): 12.50
Joint Length (ft): 11,635.25

Section Comments: slab sizes vary

Last Insp Date: 11/22/2021
PCI: 56
Total Samples: 26
Surveyed: 7

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 32
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	L	1 Slabs
63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	H	24 Slabs
74 JOINT SPALL	L	2 Slabs
74 JOINT SPALL	M	2 Slabs
75 CORNER SPALL	L	4 Slabs
75 CORNER SPALL	M	4 Slabs
76 ASR	H	1 Slabs
76 ASR	L	4 Slabs
76 ASR	M	4 Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 36
Sample Area (Slabs): 16

Sample Comments:

63 LINEAR CR	L	3 Slabs
63 LINEAR CR	M	4 Slabs
65 JT SEAL DMG	H	16 Slabs
72 SHAT. SLAB	L	2 Slabs
72 SHAT. SLAB	M	1 Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 44
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	M	5 Slabs
65 JT SEAL DMG	H	20 Slabs
76 ASR	M	3 Slabs

RE-INSPECTION REPORT
SOUTHEAST IOWA REGIONAL AIRPORT

Sample Number: 11

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 16
Sample Comments:

62 CORNER BREAK	M	1 Slabs
65 JT SEAL DMG	H	16 Slabs

Sample Number: 14

Sample Type: R
Sample PCI: 61
Sample Area (Slabs): 32
Sample Comments:

63 LINEAR CR	L	3 Slabs
65 JT SEAL DMG	H	32 Slabs
66 SMALL PATCH	H	1 Slabs
67 LARGE PATCH	L	4 Slabs
76 ASR	L	1 Slabs
76 ASR	M	2 Slabs

Sample Number: 16

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 20
Sample Comments:

63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	H	20 Slabs

Sample Number: 21

Sample Type: R
Sample PCI: 62
Sample Area (Slabs): 20
Sample Comments:

63 LINEAR CR	M	4 Slabs
65 JT SEAL DMG	H	20 Slabs
75 CORNER SPALL	M	2 Slabs

RE-INSPECTION REPORT
SOUTHEAST IOWA REGIONAL AIRPORT

Branch - Section ID: R12BR - 01

Branch Name: SECONDARY RUNWAY Use: RUNWAY

LCD: 6/1/1998
Surface Type: PCC
Rank: S
Section Area (sf): 337,736.00
Length (ft): 3,340.00
Width (ft): 100.00
From: 12 APPROACH
To: RUNWAY 18/36

PCI Family: IowaPCCRWSE_Commercial

Slabs: 3,377
Slab Length (ft): 10.00
Slab Width (ft): 10.00
Joint Length (ft): 64,068.72

Section Comments:

Last Insp Date: 11/22/2021
PCI: 90
Total Samples: 168
Surveyed: 17

Inspection Comments:

Sample Number: 01

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

Sample Comments:

71 FAULTING	L	1 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	M	20 Slabs
71 FAULTING	L	1 Slabs
71 FAULTING	M	1 Slabs

Sample Number: 100

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs

Sample Number: 115

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs

Sample Number: 118

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs

Sample Number: 135

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs

Sample Number: 138

Sample Type: R
Sample PCI: 78
Sample Area (Slabs): 20
Sample Comments:

65 JT SEAL DMG	H	20 Slabs
71 FAULTING	L	1 Slabs
76 ASR	L	2 Slabs

Sample Number: 153

Sample Type: R
Sample PCI: 86
Sample Area (Slabs): 20
Sample Comments:

65 JT SEAL DMG	H	20 Slabs
75 CORNER SPALL	L	1 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: 96
Sample Area (Slabs): 20
Sample Comments:

65 JT SEAL DMG	L	20 Slabs
73 SHRINKAGE CR	N	2 Slabs

Sample Number: 49

Sample Type: R
Sample PCI: 92
Sample Area (Slabs): 20
Sample Comments:

63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	L	20 Slabs
73 SHRINKAGE CR	N	1 Slabs

Sample Number: 52

Sample Type: R
Sample PCI: 85
Sample Area (Slabs): 20
Sample Comments:

65 JT SEAL DMG	L	20 Slabs
74 JOINT SPALL	H	1 Slabs

Sample Number: 63

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

65 JT SEAL DMG	L	20 Slabs

Sample Number: 66

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

65 JT SEAL DMG	L	20 Slabs

Sample Number: 77

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs

Sample Number: 80

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs

Sample Number: 97

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs

RE-INSPECTION REPORT
SOUTHEAST IOWA REGIONAL AIRPORT

Branch - Section ID: R12BR - 02

Branch Name: SECONDARY RUNWAY Use: RUNWAY

LCD: 6/1/1998
Surface Type: PCC
Rank: S
Section Area (sf): 111,118.00
Length (ft): 1,100.00
Width (ft): 100.00
From: RUNWAY 18/36
To: 30 APPROACH

PCI Family: IowaPCCRWSE_Commercial

Slabs: 1,111
Slab Length (ft): 10.00
Slab Width (ft): 10.00
Joint Length (ft): 21,011.40

Section Comments:

Last Insp Date: 11/22/2021
PCI: 85
Total Samples: 57
Surveyed: 8

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 85
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
66 SMALL PATCH	L	1 Slabs
75 CORNER SPALL	L	1 Slabs

Sample Number: 03

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs

Sample Number: 13

Sample Type: R
Sample PCI: 79
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
75 CORNER SPALL	M	1 Slabs
76 ASR	L	2 Slabs

Sample Number: 16

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs

Sample Number: 33

Sample Type: R
Sample PCI: 83
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
71 FAULTING	L	2 Slabs

Sample Number: 36

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs

Sample Number: 47

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs
75 CORNER SPALL	M	1	Slabs

Sample Number: 50

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs

Branch - Section ID: R12BR - 03

Branch Name: SECONDARY RUNWAY Use: RUNWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: S
Section Area (sf): 83,250.00
Length (ft): 800.00
Width (ft): 100.00
From: RUNWAY 18/36
To: R12BR-02

PCI Family: IowaPCCRWSE_Commercial

Slabs: 533
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 12,383.44

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 27
Surveyed: 7

Inspection Comments:

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: 100
Sample Area (Slabs): 20

Sample Comments:

NO DISTRESS

Sample Number: 11

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

Sample Comments:

NO DISTRESS

Sample Number: 15

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

Sample Comments:

NO DISTRESS

Sample Number: 18

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

Sample Comments:

NO DISTRESS

Sample Number: 24

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

Sample Comments:

NO DISTRESS

Sample Number: 26

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

NO DISTRESS

Sample Comments:

Branch - Section ID: R18BR - 01

Branch Name: PRIMARY RUNWAY Use: RUNWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 558,770.00
Length (ft): 5,563.00
Width (ft): 100.00
From: 18 APPROACH
To: .

PCI Family: IowaPCCRWSE_Commercial

Slabs: 3,576
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 83,715.06

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 179
Surveyed: 18

Inspection Comments:

Sample Number: 05

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

Sample Comments:

NO DISTRESS

Sample Number: 105

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

Sample Comments:

NO DISTRESS

Sample Number: 115

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

Sample Comments:

NO DISTRESS

Sample Number: 125

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

Sample Comments:

NO DISTRESS

Sample Number: 135

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

Sample Comments:

NO DISTRESS

Sample Number: 145

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

Sample Comments:

NO DISTRESS

Sample Number: 15

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 155

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 165

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 175

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 25

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 35

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 45

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 55

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 65

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 20
NO DISTRESS

Sample Comments:

Sample Number: 75

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

NO DISTRESS

Sample Comments:

Sample Number: 85

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

NO DISTRESS

Sample Comments:

Sample Number: 95

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

NO DISTRESS

Sample Comments:

Branch - Section ID: R18BR - 02

Branch Name: PRIMARY RUNWAY Use: RUNWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 53,735.00
Length (ft): 540.00
Width (ft): 100.00
From: 36 APPROACH
To: .

PCI Family: IowaPCCRWSE_Commercial

Slabs: 344
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 7,960.74

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 18
Surveyed: 7

Inspection Comments:

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: 07

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): 20

Sample Comments:

NO DISTRESS

Sample Number: 13

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

Sample Comments:

NO DISTRESS

Sample Number: 15

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

Sample Comments:

NO DISTRESS

Sample Number: 17

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

NO DISTRESS

Sample Comments:

Branch - Section ID: T01BR - 01

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/1/2005
Surface Type: APC
Rank: P
Section Area (sf): 205,140.00
Length (ft): 3,835.00
Width (ft): 50.00
From: R12BR-01
To: R18BR-01

PCI Family: IowaAPCTWSouthern

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

Section Comments:

Last Insp Date: 11/22/2021
PCI: 29
Total Samples: 41
Surveyed: 9

Inspection Comments:

Sample Number: 07

Sample Type: R
Sample PCI: 31
Sample Area (SF): 5,000

Sample Comments:

43 BLOCK CR	L	3,000	SF	lu 7x7
47 JT REF. CR	L	300	Ft	ls
48 L & T CR	L	190	Ft	lu
48 L & T CR	M	60	Ft	w
52 RAVELING	L	2,500	SF	
52 RAVELING	M	2,500	SF	
57 WEATHERING	L	2,500	SF	

Sample Number: 17

Sample Type: R
Sample PCI: 30
Sample Area (SF): 5,000

Sample Comments:

43 BLOCK CR	L	5,000	SF	lu
47 JT REF. CR	L	150	Ft	ls
47 JT REF. CR	L	300	Ft	ls
47 JT REF. CR	M	150	Ft	w
52 RAVELING	L	2,500	SF	
52 RAVELING	M	2,500	SF	
57 WEATHERING	L	2,500	SF	

Sample Number: 18

Sample Type: A
Sample PCI: 23
Sample Area (SF): 5,000

Sample Comments:

43 BLOCK CR	L	5,000	SF	lu
47 JT REF. CR	L	250	Ft	ls
47 JT REF. CR	M	50	Ft	sec
52 RAVELING	H	132	SF	
52 RAVELING	L	2,434	SF	
52 RAVELING	M	2,434	SF	
56 SWELLING	M	6	SF	
57 WEATHERING	L	2,434	SF	

Sample Number: 22

Sample Type: R
Sample PCI: 24
Sample Area (SF): 5,000

Sample Comments:

43 BLOCK CR	L	2,500	SF	lu
43 BLOCK CR	M	2,500	SF	w
47 JT REF. CR	L	300	Ft	ls
52 RAVELING	L	2,500	SF	
52 RAVELING	M	2,500	SF	
57 WEATHERING	L	2,500	SF	

Sample Number: 27

Sample Type: R
Sample PCI: 33
Sample Area (SF): 5,000

Sample Comments:

43 BLOCK CR	L	5,000	SF	lu
47 JT REF. CR	L	200	Ft	ls
47 JT REF. CR	M	150	Ft	w fs
52 RAVELING	L	2,500	SF	
52 RAVELING	M	2,500	SF	

Sample Number: 31

Sample Type: R
Sample PCI: 28
Sample Area (SF): 5,000

Sample Comments:

43 BLOCK CR	L	4,730	SF	ls
47 JT REF. CR	L	50	Ft	lu
47 JT REF. CR	L	230	Ft	ls
50 PATCHING	L	270	SF	
52 RAVELING	H	18	SF	
52 RAVELING	L	2,221	SF	
52 RAVELING	M	2,491	SF	
56 SWELLING	L	20	SF	
56 SWELLING	M	8	SF	
57 WEATHERING	L	2,221	SF	

Sample Number: 32

Sample Type: A
Sample PCI: 17
Sample Area (SF): 4,900

Sample Comments:

43 BLOCK CR	L	4,900	SF	lu
47 JT REF. CR	L	300	Ft	ls
47 JT REF. CR	M	100	Ft	w
52 RAVELING	H	120	SF	
52 RAVELING	L	2,390	SF	
52 RAVELING	M	2,390	SF	
56 SWELLING	H	40	SF	
57 WEATHERING	L	2,390	SF	

Sample Number: 37

Sample Type: R
Sample PCI: 30
Sample Area (SF): 4,845

Sample Comments:

43 BLOCK CR	L	4,845	SF	lu 4x6
47 JT REF. CR	L	300	Ft	ls
47 JT REF. CR	M	150	Ft	w
52 RAVELING	L	2,423	SF	
52 RAVELING	M	2,423	SF	
57 WEATHERING	L	2,423	SF	

Sample Number: 41

Sample Type: R
Sample PCI: 31
Sample Area (SF): 3,875

Sample Comments:

41 ALLIGATOR CR	H	5	SF	
42 BLEEDING	N	30	SF	
47 JT REF. CR	L	160	Ft	ls
47 JT REF. CR	M	130	Ft	fs
52 RAVELING	L	1,908	SF	
52 RAVELING	M	1,938	SF	
57 WEATHERING	L	1,908	SF	

RE-INSPECTION REPORT
SOUTHEAST IOWA REGIONAL AIRPORT

Branch - Section ID: T01BR - 02

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 12,890.00
Length (ft): 155.00
Width (ft): 62.00
From: R18BR-01
To: T02BR-02

PCI Family: IowaPCCTWSE_Comm

Slabs: 82
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 1,773.00

Section Comments:

Last Insp Date: 11/22/2021
PCI: 82
Total Samples: 4
Surveyed: 3

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 78
Sample Area (Slabs): 15

Sample Comments:

65 JT SEAL DMG	H	15 Slabs
67 LARGE PATCH	L	2 Slabs
74 JOINT SPALL	M	1 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 77
Sample Area (Slabs): 25

Sample Comments:

65 JT SEAL DMG	H	25 Slabs
66 SMALL PATCH	L	2 Slabs
66 SMALL PATCH	M	2 Slabs
75 CORNER SPALL	M	2 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 90
Sample Area (Slabs): 28

Sample Comments:

65 JT SEAL DMG	M	28 Slabs
71 FAULTING	L	1 Slabs

Branch - Section ID: T01BR - 03

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 11,350.00
Length (ft): 285.00
Width (ft): 35.00
From: T01BR-02
To: Runway 18-36

PCI Family: IowaPCCTWSE_Comm

Slabs: 130
Slab Length (ft): 10.00
Slab Width (ft): 8.75
Joint Length (ft): 2,068.03

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 7
Surveyed: 4

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: 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): 20

Sample Comments:

NO DISTRESS

Branch - Section ID: T01BR - 04

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 15,250.00
Length (ft): 210.00
Width (ft): 62.00
From: Runway 18-36
To: T01BR-01

PCI Family: IowaPCCTWSE_Comm

Slabs: 98
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 2,123.38

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 5
Surveyed: 4

Inspection Comments:

Sample Number: 01

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

NO DISTRESS

Sample Comments:

Sample Number: 02

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

NO DISTRESS

Sample Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 22

NO DISTRESS

Sample Comments:

Sample Number: 04

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

NO DISTRESS

Sample Comments:

Branch - Section ID: T02BR - 01

Branch Name: TAXIWAY 02 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 20,640.00
Length (ft): 400.00
Width (ft): 50.00
From: R18BR-01
To: R12BR-02

PCI Family: IowaPCCTWSE_Comm

Slabs: 132
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 2,838.00

Section Comments:

Last Insp Date: 11/22/2021
PCI: 81
Total Samples: 7
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 74
Sample Area (Slabs): 12

Sample Comments:

62 CORNER BREAK	L	1 Slabs
63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	M	12 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 71
Sample Area (Slabs): 20

Sample Comments:

62 CORNER BREAK	M	1 Slabs
63 LINEAR CR	M	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: 05

Sample Type: R
Sample PCI: 83
Sample Area (Slabs): 16

Sample Comments:

63 LINEAR CR	L	2 Slabs
65 JT SEAL DMG	L	16 Slabs
76 ASR	L	1 Slabs

Branch - Section ID: T02BR - 02

Branch Name: TAXIWAY 02 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 298,130.00
Length (ft): 5,760.00
Width (ft): 50.00
From: R12BR-02
To: R18BR-02

PCI Family: IowaPCCTWSE_Comm

Slabs: 1,908
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 41,686.44

Section Comments:

Last Insp Date: 11/22/2021
PCI: 79
Total Samples: 95
Surveyed: 10

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	L	20 Slabs
66 SMALL PATCH	L	3 Slabs
71 FAULTING	L	2 Slabs
76 ASR	L	1 Slabs

Sample Number: 13

Sample Type: R
Sample PCI: 62
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	L	1 Slabs
63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	H	20 Slabs
76 ASR	M	2 Slabs

Sample Number: 23

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: 83
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
76 ASR	L	1 Slabs

Sample Number: 43

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

Sample Comments:

65 JT SEAL DMG	M	20 Slabs
75 CORNER SPALL	M	2 Slabs

Sample Number: 53

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

Sample Comments:

65 JT SEAL DMG	M	20	Slabs
76 ASR	L	1	Slabs

Sample Number: 63

Sample Type: R
Sample PCI: 69
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20	Slabs
71 FAULTING	L	1	Slabs
75 CORNER SPALL	H	1	Slabs
75 CORNER SPALL	M	1	Slabs
76 ASR	L	1	Slabs

Sample Number: 73

Sample Type: R
Sample PCI: 79
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20	Slabs
71 FAULTING	L	1	Slabs
75 CORNER SPALL	M	1	Slabs

Sample Number: 84

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs

Sample Number: 93

Sample Type: R
Sample PCI: 59
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	M	20	Slabs
66 SMALL PATCH	L	5	Slabs
67 LARGE PATCH	L	1	Slabs
67 LARGE PATCH	M	1	Slabs
71 FAULTING	L	3	Slabs
74 JOINT SPALL	H	1	Slabs
76 ASR	L	3	Slabs

Branch - Section ID: T02BR - 03

Branch Name: TAXIWAY 02 Use: TAXIWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 21,785.00
Length (ft): 435.00
Width (ft): 44.00
From: T02BR-01
To: Runway 18-36

PCI Family: IowaPCCTWSE_Comm

Slabs: 249
Slab Length (ft): 10.00
Slab Width (ft): 8.75
Joint Length (ft): 4,123.02

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 10
Surveyed: 5

Inspection Comments:

Sample Number: 03

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

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): 20

Sample Comments:

NO DISTRESS

Sample Number: 07

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

Sample Comments:

NO DISTRESS

Sample Number: 10

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

Sample Comments:

NO DISTRESS

Branch - Section ID: T03BR - 03

Branch Name: TAXIWAY 03 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 70,854.00
Length (ft): 1,120.00
Width (ft): 63.00
From: T03BR-04
To: T05BR-02

PCI Family: IowaPCCTWSE_Comm

Slabs: 453
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 10,148.71

Section Comments:

Last Insp Date: 11/22/2021
PCI: 82
Total Samples: 22
Surveyed: 7

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 74
Sample Area (Slabs): 20

Sample Comments:

62 CORNER BREAK	L	1 Slabs
63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	L	20 Slabs
75 CORNER SPALL	M	1 Slabs
76 ASR	L	1 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 81
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	L	2 Slabs
66 SMALL PATCH	L	1 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	H	2 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 79
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	H	1 Slabs

Sample Number: 10

Sample Type: R
Sample PCI: 81
Sample Area (Slabs): 20

Sample Comments:

62 CORNER BREAK	L	2 Slabs
65 JT SEAL DMG	H	20 Slabs
66 SMALL PATCH	L	2 Slabs

Sample Number: 13

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

Sample Comments:

65 JT SEAL DMG	M	20	Slabs

Sample Number: 17

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

Sample Comments:

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

Sample Number: 19

Sample Type: R
Sample PCI: 80
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20	Slabs
74 JOINT SPALL	M	1	Slabs
75 CORNER SPALL	M	1	Slabs

Branch - Section ID: T03BR - 04

Branch Name: TAXIWAY 03 Use: TAXIWAY

LCD: 6/1/2005
Surface Type: APC
Rank: P
Section Area (sf): 39,660.00
Length (ft): 745.00
Width (ft): 50.00
From: R12BR-02
To: T03BR-03

PCI Family: IowaAPCTWSouthern

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

Section Comments:

Last Insp Date: 11/22/2021
PCI: 38
Total Samples: 8
Surveyed: 5

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 40
Sample Area (SF): 4,820

Sample Comments:

41 ALLIGATOR CR	M	25	SF	
43 BLOCK CR	L	4,795	SF	lu ls 4x7
47 JT REF. CR	L	400	Ft	ls
52 RAVELING	L	4,820	SF	
57 WEATHERING	L	4,820	SF	

Sample Number: 04

Sample Type: R
Sample PCI: 40
Sample Area (SF): 5,000

Sample Comments:

41 ALLIGATOR CR	M	30	SF	
43 BLOCK CR	L	4,970	SF	lu
47 JT REF. CR	L	350	Ft	ls
52 RAVELING	L	5,000	SF	
57 WEATHERING	L	5,000	SF	

Sample Number: 05

Sample Type: R
Sample PCI: 43
Sample Area (SF): 5,000

Sample Comments:

41 ALLIGATOR CR	M	15	SF	
43 BLOCK CR	L	4,985	SF	lu ls
47 JT REF. CR	L	400	Ft	ls
52 RAVELING	L	5,000	SF	
57 WEATHERING	L	5,000	SF	

Sample Number: 06

Sample Type: R
Sample PCI: 31
Sample Area (SF): 5,000

Sample Comments:

41 ALLIGATOR CR	M	130	SF	
43 BLOCK CR	L	4,870	SF	lu ls
47 JT REF. CR	L	400	Ft	ls
52 RAVELING	L	5,000	SF	
57 WEATHERING	L	5,000	SF	

Sample Number: 07

Sample Type: A
Sample PCI: 34
Sample Area (SF): 5,830

Sample Comments:

41 ALLIGATOR CR	M	174	SF	
43 BLOCK CR	L	5,006	SF	lu ls 4x7
47 JT REF. CR	L	140	Ft	ls
47 JT REF. CR	L	150	Ft	lu
50 PATCHING	L	650	SF	
52 RAVELING	M	86	SF	
57 WEATHERING	L	5,094	SF	

Branch - Section ID: T04BR - 01

Branch Name: TAXIWAY 04 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 32,954.00
Length (ft): 262.00
Width (ft): 85.00
From: T01BR-02
To: T03BR-03

PCI Family: IowaPCCTWSE_Comm

Slabs: 211
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 4,759.17

Section Comments:

Last Insp Date: 11/22/2021
PCI: 80
Total Samples: 12
Surveyed: 7

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 96
Sample Area (Slabs): 16

Sample Comments:

65 JT SEAL DMG	L	16 Slabs
66 SMALL PATCH	L	2 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 78
Sample Area (Slabs): 15

Sample Comments:

62 CORNER BREAK	L	1 Slabs
65 JT SEAL DMG	H	15 Slabs
66 SMALL PATCH	L	5 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 85
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
66 SMALL PATCH	M	1 Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
66 SMALL PATCH	L	2 Slabs
75 CORNER SPALL	M	1 Slabs

Sample Number: 09

Sample Type: R
Sample PCI: 77
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
66 SMALL PATCH	L	1 Slabs
66 SMALL PATCH	M	2 Slabs
76 ASR	L	1 Slabs

Sample Number: 10

Sample Type: R
Sample PCI: 79
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
66 SMALL PATCH	H	1 Slabs
66 SMALL PATCH	L	6 Slabs

Sample Number: 11

Sample Type: A
Sample PCI: 37
Sample Area (Slabs): 13

Sample Comments:

65 JT SEAL DMG	H	13 Slabs
66 SMALL PATCH	L	2 Slabs
67 LARGE PATCH	M	1 Slabs
75 CORNER SPALL	M	1 Slabs
76 ASR	H	1 Slabs
76 ASR	L	1 Slabs
76 ASR	M	1 Slabs

Branch - Section ID: T05BR - 01

Branch Name: TAXIWAY 05 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 18,395.00
Length (ft): 135.00
Width (ft): 135.00
From: R18BR-01
To: T02BR-02

PCI Family: IowaPCCTWSE_Comm

Slabs: 118
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 2,670.68

Section Comments:

Last Insp Date: 11/22/2021
PCI: 79
Total Samples: 6
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 72
Sample Area (Slabs): 12

Sample Comments:

65 JT SEAL DMG	M	12 Slabs
67 LARGE PATCH	L	1 Slabs
71 FAULTING	L	2 Slabs
76 ASR	L	2 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 81
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	M	18 Slabs
66 SMALL PATCH	L	2 Slabs
76 ASR	L	4 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 80
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	M	18 Slabs
66 SMALL PATCH	H	1 Slabs
73 SHRINKAGE CR	N	1 Slabs
76 ASR	L	2 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	H	18 Slabs
74 JOINT SPALL	L	1 Slabs
74 JOINT SPALL	M	1 Slabs

Branch - Section ID: T05BR - 02

Branch Name: TAXIWAY 05 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 33,565.00
Length (ft): 262.00
Width (ft): 75.00
From: T02BR-02
To: T03BR-03

PCI Family: IowaPCCTWSE_Comm

Slabs: 215
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 4,794.76

Section Comments:

Last Insp Date: 11/22/2021
PCI: 62
Total Samples: 9
Surveyed: 5

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 52
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
73 SHRINKAGE CR	N	1 Slabs
75 CORNER SPALL	L	1 Slabs
76 ASR	L	3 Slabs
76 ASR	M	5 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 60
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
76 ASR	L	5 Slabs
76 ASR	M	3 Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 65
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
76 ASR	L	4 Slabs
76 ASR	M	2 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 78
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
76 ASR	L	7 Slabs

Sample Number: 07

Sample Type: R

Sample PCI: 57

Sample Area (Slabs): 25

Sample Comments:

65 JT SEAL DMG	M	25	Slabs
66 SMALL PATCH	L	1	Slabs
74 JOINT SPALL	M	1	Slabs
75 CORNER SPALL	M	1	Slabs
76 ASR	L	3	Slabs
76 ASR	M	3	Slabs

Branch - Section ID: T05BR - 03

Branch Name: TAXIWAY 05 Use: TAXIWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 14,510.00
Length (ft): 185.00
Width (ft): 75.00
From: T05BR-01
To: Runway 18-36

PCI Family: IowaPCCTWSE_Comm

Slabs: 93
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 2,049.70

Section Comments:

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 5
Surveyed: 4

Inspection Comments:

Sample Number: 01

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

Sample Comments:

NO DISTRESS

Sample Number: 02

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

Sample Comments:

NO DISTRESS

Sample Number: 03

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

Sample Comments:

NO DISTRESS

Sample Number: 04

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

Sample Comments:

NO DISTRESS

Branch - Section ID: T06BR - 01

Branch Name: TAXIWAY 06 Use: TAXIWAY

LCD: 1/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 16,245.00
Length (ft): 190.00
Width (ft): 62.00
From: R18BR-01
To: T02BR-02

PCI Family: IowaPCCTWSE_Comm

Slabs: 104
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 2,253.78

Section Comments:

Last Insp Date: 11/22/2021
PCI: 79
Total Samples: 5
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 89
Sample Area (Slabs): 15

Sample Comments:

65 JT SEAL DMG	L	15 Slabs
75 CORNER SPALL	M	2 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 74
Sample Area (Slabs): 16

Sample Comments:

74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	L	2 Slabs
75 CORNER SPALL	M	3 Slabs
76 ASR	L	1 Slabs

Sample Number: 03

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

Sample Comments:

66 SMALL PATCH	L	3 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	L	1 Slabs
75 CORNER SPALL	M	2 Slabs
76 ASR	L	1 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 71
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
74 JOINT SPALL	M	2 Slabs
75 CORNER SPALL	L	1 Slabs
75 CORNER SPALL	M	2 Slabs
76 ASR	L	2 Slabs

Branch - Section ID: T06BR - 02

Branch Name: TAXIWAY 06 Use: TAXIWAY

LCD: 6/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 9,770.00
Length (ft): 140.00
Width (ft): 62.00
From: T06BR-01
To: Runway 18-36

PCI Family: IowaPCCTWSE_Comm

Slabs: 65
Slab Length (ft): 12.50
Slab Width (ft): 12.00
Joint Length (ft): 1,369.66

Section Comments: slab width varies

Last Insp Date: 11/22/2021
PCI: 100
Total Samples: 3
Surveyed: 3

Inspection Comments:

Sample Number: 01

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

NO DISTRESS

Sample Comments:

Sample Number: 02

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

NO DISTRESS

Sample Comments:

Sample Number: 03

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

NO DISTRESS

Sample Comments:

Branch - Section ID: TH01BR - 01

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

LCD: 7/3/1995
Surface Type: AC
Rank: P
Section Area (sf): 30,884.00
Length (ft): 1,050.00
Width (ft): 30.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaASPHALTTHSouthern

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

Section Comments:

Last Insp Date: 11/22/2021
PCI: 19
Total Samples: 8
Surveyed: 4

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 20
Sample Area (SF): 3,750

Sample Comments:

48 L & T CR	L	75	Ft	lu
48 L & T CR	M	300	Ft	w sec
52 RAVELING	H	3,750	SF	
53 RUTTING	L	75	SF	

Sample Number: 03

Sample Type: R
Sample PCI: 23
Sample Area (SF): 3,750

Sample Comments:

48 L & T CR	L	58	Ft	lu
48 L & T CR	M	275	Ft	w sec
52 RAVELING	H	3,750	SF	
56 SWELLING	L	26	SF	

Sample Number: 05

Sample Type: R
Sample PCI: 15
Sample Area (SF): 3,750

Sample Comments:

41 ALLIGATOR CR	M	27	SF	
48 L & T CR	L	40	Ft	lu
48 L & T CR	M	205	Ft	w sec
50 PATCHING	L	150	SF	
52 RAVELING	H	3,600	SF	
53 RUTTING	L	75	SF	

Sample Number: 07

Sample Type: R

Sample PCI: 16

Sample Area (SF): 3,125

Sample Comments:

41 ALLIGATOR CR	L	50	SF	
42 BLEEDING	N	30	SF	
48 L & T CR	L	35	Ft	lu
48 L & T CR	M	130	Ft	w sec
52 RAVELING	H	3,095	SF	

Branch - Section ID: TH01BR - 02

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

LCD: 8/3/2012
Surface Type: PCC
Rank: P
Section Area (sf): 51,850.00
Length (ft): 1,550.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SE

Slabs: 360
Slab Length (ft): 12.00
Slab Width (ft): 12.00
Joint Length (ft): 7,126.79

Section Comments:

Last Insp Date: 11/22/2021
PCI: 93
Total Samples: 19
Surveyed: 8

Inspection Comments:

Sample Number: 01

Sample Type: A
Sample PCI: 56
Sample Area (Slabs): 15

Sample Comments:

63 LINEAR CR	L	1	Slabs
65 JT SEAL DMG	H	15	Slabs
72 SHAT. SLAB	H	1	Slabs

Sample Number: 04

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

Sample Comments:

65 JT SEAL DMG	L	21	Slabs

Sample Number: 06

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

Sample Comments:

65 JT SEAL DMG	L	21	Slabs

Sample Number: 08

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

Sample Comments:

65 JT SEAL DMG	L	18	Slabs

Sample Number: 11

Sample Type: R
Sample PCI: 89
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	M	20	Slabs
74 JOINT SPALL	M	1	Slabs

Sample Number: 14

Sample Type: R
Sample PCI: 94
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	L	18	Slabs
67 LARGE PATCH	L	1	Slabs

Sample Number: 16

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 21

Sample Comments:

65 JT SEAL DMG	M	21	Slabs

Sample Number: 18

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 21

Sample Comments:

65 JT SEAL DMG	M	21	Slabs

APPENDIX D

WORK HISTORY REPORT

Work History

Pavement Database: IA 2021

Network: SOUTHEAST IOWA REGIONAL AIRPORT

Branch - Section ID: A01BR - 01

LCD: 5/14/2016
Use: APRON
Rank: P
Surface: PCC

Length (ft): 320.00
Width (ft): 238.00
True Area (sf): 83,062.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
05-14-2016	CR-PC	Complete Reconstruction - PCC	$0.00	8.00	True	-
05-13-2016	BA-AG	Base Course - Aggregate	$0.00	4.00	False	Geotextile fabric was also installed
05-12-2016	SG-CO	Subgrade - Compacted	$0.00	0.00	False	-
06-30-1974	NC-PC	New Construction - PCC	$0.00	0.00	True	-
06-02-1943	NC-PC	New Construction - PCC	$0.00	6.00	True	6" PCC
06-01-1943	SB-AG	Subbase - Aggregate	$0.00	11.00	False	11" P154 SUBBASE

Branch - Section ID: A01BR - 02

LCD: 6/30/1974
Use: APRON
Rank: P
Surface: PCC

Length (ft): 380.00
Width (ft): 250.00
True Area (sf): 93,343.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2010	SL-PC	Slab Replacement - PCC	$0.00	0.00	False	State Funded - $51,850
06-30-1974	NU-IN	New Construction - Initial	$0.00	0.00	True	-
06-02-1943	NC-PC	New Construction - PCC	$0.00	9.00	True	9" PCC SURFACE
06-01-1943	BA-AG	Base Course - Aggregate	$0.00	10.00	False	10" P209 CABC

Branch - Section ID: R12BR - 01

LCD: 6/1/1998
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 3,340.00
Width (ft): 100.00
True Area (sf): 337,736.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2016	JS-SI	Joint Seal - Silicon	$0.00	0.00	False	FIELD EST, PARTIAL
06-01-1998	OL-PU	Overlay - PCC Unbonded	$0.00	6.00	True	-
06-30-1977	OL-AC	Overlay - AC	$0.00	2.00	True	2" P401 AC OVERLAY
06-01-1944	NC-PC	New Construction - PCC	$0.00	0.00	True	10"-8"-10" PCC

Branch - Section ID: R12BR - 02

LCD: 6/1/1998
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 1,100.00
Width (ft): 100.00
True Area (sf): 111,118.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-1998	OL-PU	Overlay - PCC Unbonded	$0.00	6.00	True	-
06-30-1977	OL-AC	Overlay - AC	$0.00	2.00	True	2" P401 AC OVERLAY
06-01-1944	NC-PC	New Construction - PCC	$0.00	0.00	True	10"-8"-10" PCC

Work History

Pavement Database: IA 2021

Branch - Section ID: R12BR - 03

LCD: 6/3/2021
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 800.00
Width (ft): 100.00
True Area (sf): 83,250.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	CR-PC	Complete Reconstruction - PCC	$302,030.00	7.00	True	7" PCC (P-501)
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" recycled conc. aggregate base course (P-219)
06-01-2021	SG-CO	Subgrade - Compacted	$0.00	0.00	False	Compacted subgrade (P-152) depth varies
06-01-2005	OL-AS	Overlay - AC Structural	$0.00	2.00	True	W/AC BASE COURSE, 2017 CORE avg 4.4" AC/
06-30-1977	OL-AC	Overlay - AC	$0.00	2.00	True	2" P401 AC OVERLAY
06-01-1944	NC-PC	New Construction - PCC	$0.00	0.00	True	10"-8"-10" PCC

Branch - Section ID: R18BR - 01

LCD: 6/3/2021
Use: RUNWAY
Rank: P
Surface: PCC

Length (ft): 5,563.00
Width (ft): 100.00
True Area (sf): 558,770.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	CR-PC	Complete Reconstruction - PCC	$8,450,430.00	8.00	True	8" PCC (P-501)
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" P-219 recycled conc aggregate base course on
06-01-2021	SG-CO	Subgrade - Compacted	$0.00	0.00	False	min.10" (varies) compacted subgrade; additional la
01-01-2016	PA-AS	Patching - AC Shallow	$0.00	0.00	False	FIELD EST, 2017 CORE: avg 6" AC/8.4" PCC
10-01-2011	PA-AS	Patching - AC Shallow	$0.00	0.00	False	-
06-01-2005	OL-AS	Overlay - AC Structural	$3,391,996.00	2.00	True	W/AC BASE COURSE; Total Project Cost $4,038,
06-30-1977	OL-AC	Overlay - AC	$0.00	3.00	True	3" P401 AC Overlay
06-01-1970	OL-AC	Overlay - AC	$0.00	3.00	True	EST. DATE
06-01-1944	NC-PC	New Construction - PCC	$0.00	0.00	True	10"-8"-10" PCC

Branch - Section ID: R18BR - 02

LCD: 6/3/2021
Use: RUNWAY
Rank: P
Surface: PCC

Length (ft): 540.00
Width (ft): 100.00
True Area (sf): 53,735.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	CR-PC	Complete Reconstruction - PCC	$8,450,430.00	8.00	True	8" PCC (P-501)
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" P-219 recycled conc aggregate base course on
06-01-2021	SG-CO	Subgrade - Compacted	$0.00	0.00	False	Compacted subgrade (P-152) depth varies.
01-01-2016	PA-AS	Patching - AC Shallow	$0.00	0.00	False	FIELD EST, 2017 CORE: avg 6" AC/8.4" PCC
10-01-2011	PA-AS	Patching - AC Shallow	$0.00	0.00	False	-
06-01-2005	OL-AS	Overlay - AC Structural	$3,391,996.00	2.00	True	W/AC BASE COURSE; Total Project Cost $4,038,
06-30-1977	OL-AC	Overlay - AC	$0.00	3.00	True	3" P401 AC Overlay
06-01-1970	OL-AC	Overlay - AC	$0.00	3.00	True	EST. DATE
06-01-1944	NC-PC	New Construction - PCC	$0.00	0.00	True	10"-8"-10" PCC

Work History

Pavement Database: IA 2021

Branch - Section ID: T01BR - 01

LCD: 6/1/2005
Use: TAXIWAY
Rank: P
Surface: APC

Length (ft): 3,835.00
Width (ft): 50.00
True Area (sf): 205,140.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2005	OL-AS	Overlay - AC Structural	$0.00	1.50	True	W/AC BASE COURSE
06-01-1977	OL-AC	Overlay - AC	$0.00	3.00	True	3" P401 AC SURFACE
06-02-1943	NC-PC	New Construction - PCC	$0.00	10.00	True	10" PCC SURFACE
06-01-1943	SG-CO	Subgrade - Compacted	$0.00	8.00	False	8" SUBGRADE

Branch - Section ID: T01BR - 02

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 155.00
Width (ft): 62.50
True Area (sf): 12,890.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
01-01-2003	CR-PC	Complete Reconstruction - PCC	$0.00	0.00	True	-
06-02-1943	NC-PC	New Construction - PCC	$0.00	10.00	True	10" PCC
06-01-1943	SG-CO	Subgrade - Compacted	$0.00	8.00	False	8" SUBGRADE

Branch - Section ID: T01BR - 03

LCD: 6/3/2021
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 285.00
Width (ft): 35.00
True Area (sf): 11,350.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	CR-PC	Complete Reconstruction - PCC	$284,720.00	7.00	True	7" PCC P-501
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" P-219 RECYCLED CONC AGGREGATE BASE
06-01-2021	SG-ST	Subgrade - Stabilized	$0.00	12.00	False	P-155 12" lime treated subgrade.
06-01-2005	OL-AS	Overlay - AC Structural	$0.00	1.50	True	W/AC BASE COURSE
06-01-1977	OL-AC	Overlay - AC	$0.00	3.00	True	3" P401 AC SURFACE
06-02-1943	NC-PC	New Construction - PCC	$0.00	10.00	True	10" PCC SURFACE
06-01-1943	SG-CO	Subgrade - Compacted	$0.00	8.00	False	8" SUBGRADE

Branch - Section ID: T01BR - 04

LCD: 6/3/2021
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 210.00
Width (ft): 62.50
True Area (sf): 15,250.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	CR-PC	Complete Reconstruction - PCC	$284,720.00	8.00	True	8" PCC P-501
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" P-219 RECYCLED CONC AGGREGATE BASE
06-01-2021	SG-ST	Subgrade - Stabilized	$0.00	10.00	False	P-155 10" lime treated subgrade.
06-25-2003	CR-PC	Complete Reconstruction - PCC	$152,500.00	0.00	True	-
06-02-1943	NC-PC	New Construction - PCC	$0.00	10.00	True	10" PCC SURFACE
06-01-1943	SG-CO	Subgrade - Compacted	$0.00	8.00	False	8" SUBGRADE

Work History

Pavement Database: IA 2021

Branch - Section ID: T02BR - 01

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 400.00
Width (ft): 50.00
True Area (sf): 20,640.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
01-01-2003	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T02BR - 02

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 5,760.00
Width (ft): 50.00
True Area (sf): 298,130.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-02-2021	GR-PP	Grinding (Localized)	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
01-01-2003	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T02BR - 03

LCD: 6/3/2021
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 435.00
Width (ft): 44.00
True Area (sf): 21,785.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	NC-PC	New Construction - PCC	$8,450,430.00	8.00	True	8" PCC (P-501)
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" recycled conc aggregate base course on engine
06-01-2021	SG-CO	Subgrade - Compacted	$0.00	0.00	False	Compacted subgrade (P-152) depth varies.

Branch - Section ID: T03BR - 03

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 1,120.00
Width (ft): 63.00
True Area (sf): 70,854.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2003	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Work History

Pavement Database: IA 2021

Branch - Section ID: T03BR - 04

LCD: 6/1/2005
Use: TAXIWAY
Rank: P
Surface: APC

Length (ft): 745.00
Width (ft): 50.00
True Area (sf): 39,660.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2005	OL-AC	Overlay - AC	$0.00	1.50	True	1.5" AC OVERLAY
06-26-1977	OL-AC	Overlay - AC	$0.00	3.00	True	3" AC OV
06-02-1943	NC-PC	New Construction - PCC	$317,280.00	10.00	True	10" PCC
06-01-1943	SG-CO	Subgrade - Compacted	$0.00	8.00	False	8" SUBGRADE

Branch - Section ID: T04BR - 01

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 262.00
Width (ft): 85.00
True Area (sf): 32,954.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2003	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T05BR - 01

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 135.00
Width (ft): 135.00
True Area (sf): 18,395.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
01-01-2003	NU-IN	New Construction - Initial	$0.00	18.00	True	18" PCC ON COMPACTED SUBRADE

Branch - Section ID: T05BR - 02

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 262.00
Width (ft): 75.00
True Area (sf): 33,565.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2003	NU-IN	New Construction - Initial	$0.00	18.00	True	18" PCC ON COMPACTED SUBRADE

Branch - Section ID: T05BR - 03

LCD: 6/3/2021
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 185.00
Width (ft): 75.00
True Area (sf): 14,510.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	CR-PC	Complete Reconstruction - PCC	$284,720.00	8.00	True	8" PCC P-501
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" RECYCLED CONC AGGREGATE BASE COU
06-01-2021	SG-ST	Subgrade - Stabilized	$0.00	10.00	False	P-155 10" lime treated subgrade.
01-01-2003	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Work History

Pavement Database: IA 2021

Branch - Section ID: T06BR - 01

LCD: 1/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 190.00
Width (ft): 62.50
True Area (sf): 16,245.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
06-01-2021	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Maintenance work limited to area adjacent to new
01-01-2003	CR-PC	Complete Reconstruction - PCC	$0.00	18.00	True	18" PCC ON COMPACTED SUBRADE
06-02-1943	NC-PC	New Construction - PCC	$0.00	10.00	True	10" PCC SURFACE
06-01-1943	SG-CO	Subgrade - Compacted	$0.00	8.00	False	8" SUBGRADE

Branch - Section ID: T06BR - 02

LCD: 6/3/2021
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 140.00
Width (ft): 62.50
True Area (sf): 9,770.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2021	CR-PC	Complete Reconstruction - PCC	$284,720.00	8.00	True	8" PCC P-501
06-02-2021	BA-AG	Base Course - Aggregate	$0.00	8.00	False	8" RECYCLED CONC AGGREGATE BASE COU
06-01-2021	SG-ST	Subgrade - Stabilized	$0.00	10.00	False	P-155 10" lime treated subgrade.
01-01-2003	NU-IN	New Construction - Initial	$0.00	0.00	True	-
06-02-1943	NC-PC	New Construction - PCC	$0.00	10.00	True	10" PCC SURFACE
06-01-1943	SG-CO	Subgrade - Compacted	$0.00	8.00	False	8" SUBGRADE

Branch - Section ID: TH01BR - 01

LCD: 7/3/1995
Use: T-HANGAR
Rank: P
Surface: AC

Length (ft): 1,050.00
Width (ft): 30.00
True Area (sf): 30,884.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2010	PA-AD	Patching - AC Deep	$0.00	0.00	False	FIELD EST.
07-03-1995	NC-AC	New Construction - AC	$0.00	2.00	True	2" AC IDOT TYPE B
07-02-1995	BA-AG	Base Course - Aggregate	$0.00	3.00	False	3" BASE IDOT GRADE #26
07-01-1995	SB-AG	Subbase - Aggregate	$0.00	7.50	False	7.5" SUBBASE IDOT GRAD. #12

Branch - Section ID: TH01BR - 02

LCD: 8/3/2012
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 1,550.00
Width (ft): 35.00
True Area (sf): 51,850.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2020	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	est.
08-03-2012	CR-PC	Complete Reconstruction - PCC	$0.00	6.00	True	6" PCC
08-02-2012	SB-AG	Subbase - Aggregate	$0.00	6.00	False	6" P-154 SUBBASE
08-01-2012	SG-ST	Subgrade - Stabilized	$0.00	12.00	False	12" P-158 FLY ASH SUBGRADE

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
R12BR	01	Faulting	Medium	10	Slabs	Grinding (Localized)	$0.36	$35
R12BR	01	Joint Seal Damage	Medium	194	Slabs	Joint Seal (Localized)	$3.02	$11,120
R12BR	01	Joint Seal Damage	High	1,747	Slabs	Joint Seal (Localized)	$3.02	$100,079
R12BR	01	Joint Spalling	High	10	Slabs	Patching - PCC Partial Depth	$37.54	$2,941
R12BR	02	Corner Spalling	Medium	14	Slabs	Patching - PCC Partial Depth	$37.54	$1,403
R12BR	02	Joint Seal Damage	High	1,111	Slabs	Joint Seal (Localized)	$3.02	$63,454
T01BR	02	Corner Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	$37.54	$244
T01BR	02	Joint Seal Damage	Medium	34	Slabs	Joint Seal (Localized)	$3.02	$2,205
T01BR	02	Joint Seal Damage	High	48	Slabs	Joint Seal (Localized)	$3.02	$3,150
T01BR	02	Joint Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	$37.54	$292
T01BR	02	Small Patch	Medium	2	Slabs	Patching - PCC Full Depth	$16.76	$109
T02BR	01	Corner Break	Low	2	Slabs	Crack Sealing - PCC	$3.02	$48
T02BR	01	Corner Break	Medium	2	Slabs	Patching - PCC Full Depth	$16.76	$1,051
T02BR	01	Joint Seal Damage	Medium	101	Slabs	Joint Seal (Localized)	$3.02	$6,554
T02BR	01	LTD Cracking	Medium	6	Slabs	Crack Sealing - PCC	$3.02	$220
T02BR	02	ASR	Medium	19	Slabs	Slab Replacement - PCC	$16.76	$49,966
T02BR	02	Corner Spalling	Medium	38	Slabs	Patching - PCC Partial Depth	$37.54	$3,855
T02BR	02	Corner Spalling	High	10	Slabs	Patching - PCC Partial Depth	$37.54	$964
T02BR	02	Joint Seal Damage	Medium	763	Slabs	Joint Seal (Localized)	$3.02	$50,357

Table F-1. Year 2022 localized preventive maintenance details (continued).

Branch	Section	Distress Type	Severity	Distress Quantity	Distress Unit	Maintenance Action	Unit Cost	2022 Estimated Cost
T02BR	02	Joint Seal Damage	High	954	Slabs	Joint Seal (Localized)	$3.02	$62,946
T02BR	02	Joint Spalling	High	10	Slabs	Patching - PCC Partial Depth	$37.54	$2,891
T02BR	02	Large Patch	Medium	10	Slabs	Patching - PCC Full Depth	$16.76	$9,836
T02BR	02	LTD Cracking	Medium	10	Slabs	Crack Sealing - PCC	$3.02	$360
T03BR	03	Corner Break	Low	10	Slabs	Crack Sealing - PCC	$3.02	$240
T03BR	03	Corner Spalling	Medium	6	Slabs	Patching - PCC Partial Depth	$37.54	$654
T03BR	03	Corner Spalling	High	10	Slabs	Patching - PCC Partial Depth	$37.54	$981
T03BR	03	Joint Seal Damage	Medium	65	Slabs	Joint Seal (Localized)	$3.02	$4,378
T03BR	03	Joint Seal Damage	High	259	Slabs	Joint Seal (Localized)	$3.02	$17,514
T03BR	03	Joint Spalling	Medium	10	Slabs	Patching - PCC Partial Depth	$37.54	$2,353
T03BR	03	LTD Cracking	Medium	3	Slabs	Crack Sealing - PCC	$3.02	$122
T04BR	01	ASR	Medium	1	Slabs	Slab Replacement - PCC	$16.76	$2,619
T04BR	01	ASR	High	1	Slabs	Slab Replacement - PCC	$16.76	$2,619
T04BR	01	Corner Break	Low	2	Slabs	Crack Sealing - PCC	$3.02	$44
T04BR	01	Corner Spalling	Medium	3	Slabs	Patching - PCC Partial Depth	$37.54	$281
T04BR	01	Joint Seal Damage	High	182	Slabs	Joint Seal (Localized)	$3.02	$12,429
T04BR	01	Large Patch	Medium	1	Slabs	Patching - PCC Full Depth	$16.76	$1,031
T04BR	01	Small Patch	Medium	5	Slabs	Patching - PCC Full Depth	$16.76	$241

Table F-1. Year 2022 localized preventive maintenance details (continued).

Branch	Section	Distress Type	Severity	Distress Quantity	Distress Unit	Maintenance Action	Unit Cost	2022 Estimated Cost
T04BR	01	Small Patch	High	2	Slabs	Patching - PCC Full Depth	$16.76	$80
T05BR	01	Joint Seal Damage	Medium	86	Slabs	Joint Seal (Localized)	$3.02	$5,866
T05BR	01	Joint Seal Damage	High	32	Slabs	Joint Seal (Localized)	$3.02	$2,200
T05BR	01	Joint Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	$37.54	$433
T05BR	01	Small Patch	High	2	Slabs	Patching - PCC Full Depth	$16.76	$81
T06BR	01	Corner Spalling	Medium	12	Slabs	Patching - PCC Partial Depth	$37.54	$1,261
T06BR	01	Joint Seal Damage	High	28	Slabs	Joint Seal (Localized)	$3.02	$1,815
T06BR	01	Joint Spalling	Medium	6	Slabs	Patching - PCC Partial Depth	$37.54	$1,345
TH01BR	02	Joint Seal Damage	Medium	153	Slabs	Joint Seal (Localized)	$3.02	$9,134
TH01BR	02	Joint Seal Damage	High	15	Slabs	Joint Seal (Localized)	$3.02	$897
TH01BR	02	Joint Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	$37.54	$597
TH01BR	02	Shattered Slab	High	1	Slabs	Slab Replacement - PCC	$16.76	$2,413

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 Southeast Iowa Regional Airport.

PREPARED FOR

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