Ankeny Regional Airport

PAVEMENT MANAGEMENT REPORT

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applied pavement TECHNOLOGY

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ANKENY REGIONAL AIRPORT
PAVEMENT MANAGEMENT REPORT

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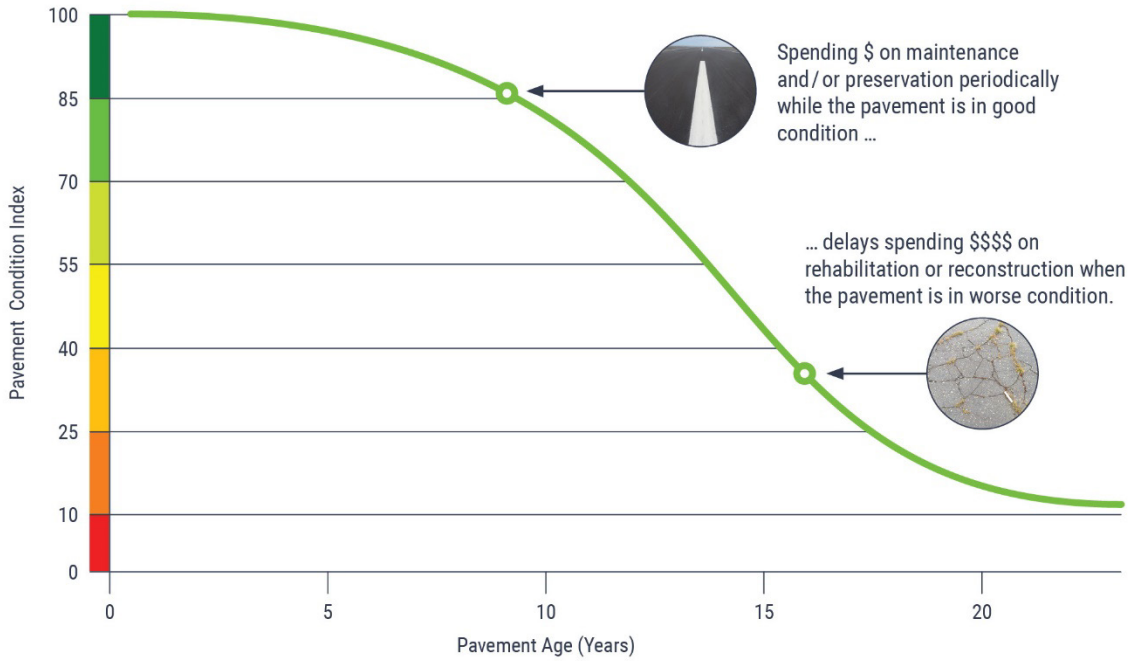
INTRODUCTION

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 Ankeny 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 Ankeny Regional Airport are presented within this report and can be used by Ankeny 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 Ankeny 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 Ankeny 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 1,866,000 square feet of pavement were evaluated at Ankeny 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 Ankeny Regional Airport.

Figure 2. Pavement area by branch use at Ankeny Regional Airport.

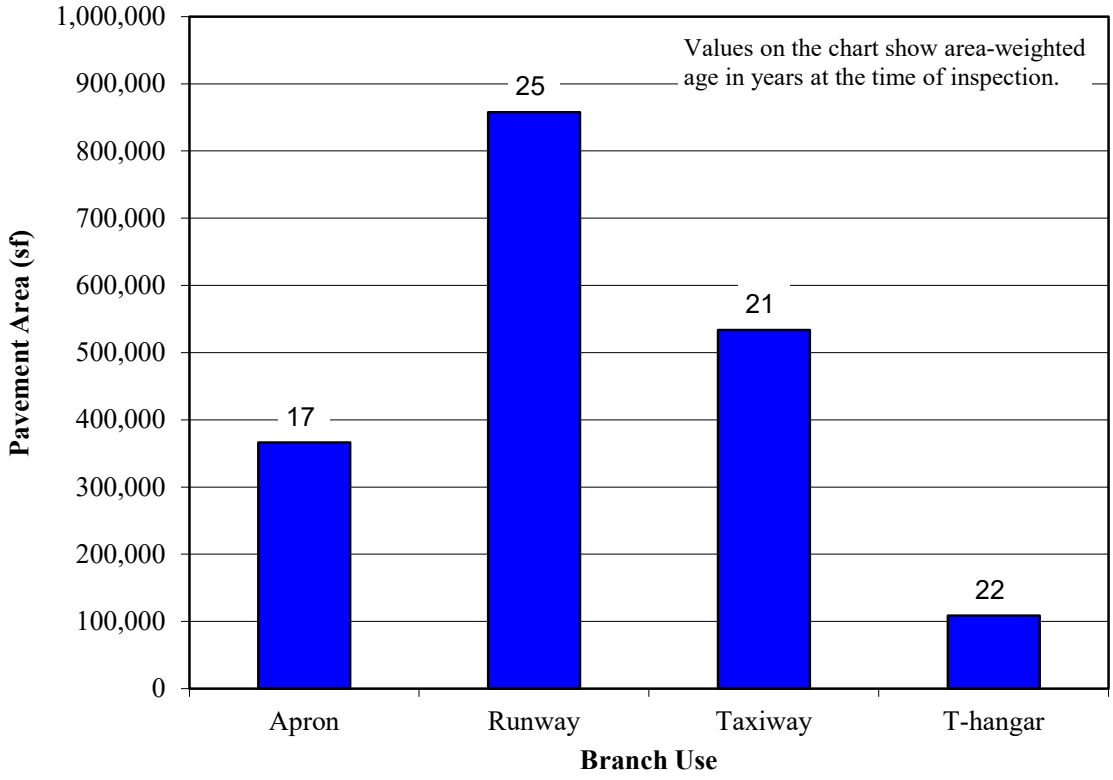
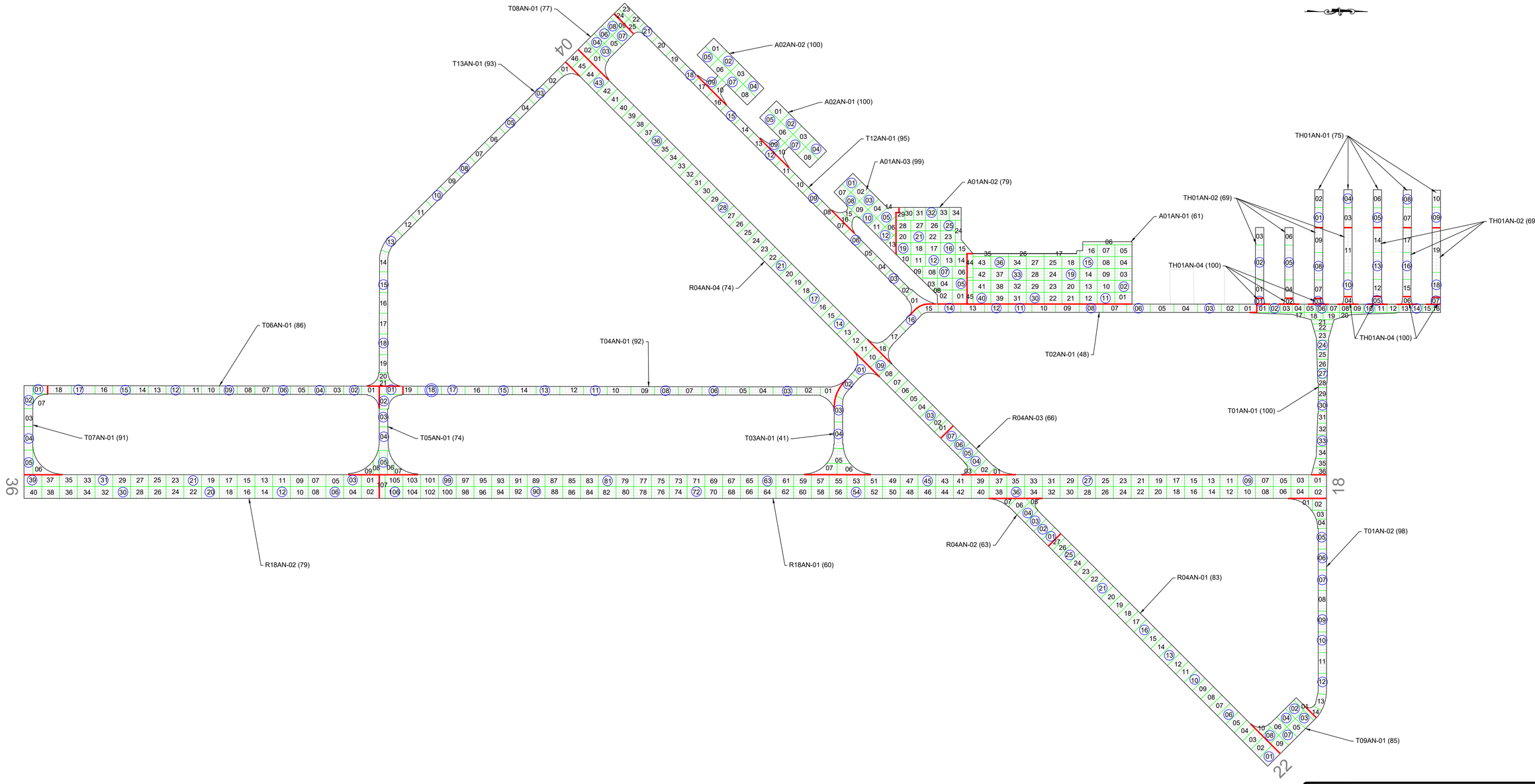


FIGURE 3. NETWORK DEFINITION MAP.



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:	Ankeny Regional Airport Ankeny, Iowa
PAGE TITLE:	Network Definition 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"=200'	JAN. 2022	KEW	DSP
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PAVEMENT EVALUATION

Pavement Evaluation Procedure

APTech inspected the pavements at Ankeny 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.

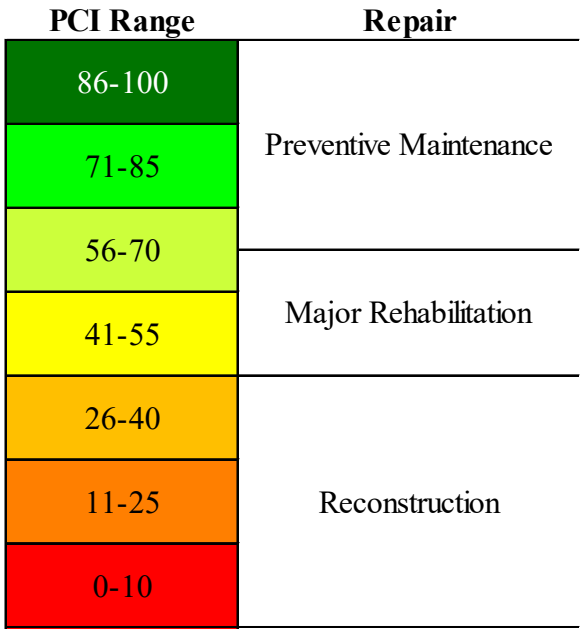
Figure 4. Visual representation of PCI scale on typical pavement surfaces[1].

PCI = 100 PCI = 60 PCI = 35

[1]Photographs shown are not specific to Ankeny 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 Ankeny Regional Airport were inspected in November 2021. The 2021 area-weighted condition of Ankeny Regional Airport is 75, with conditions ranging from 41 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 79.

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

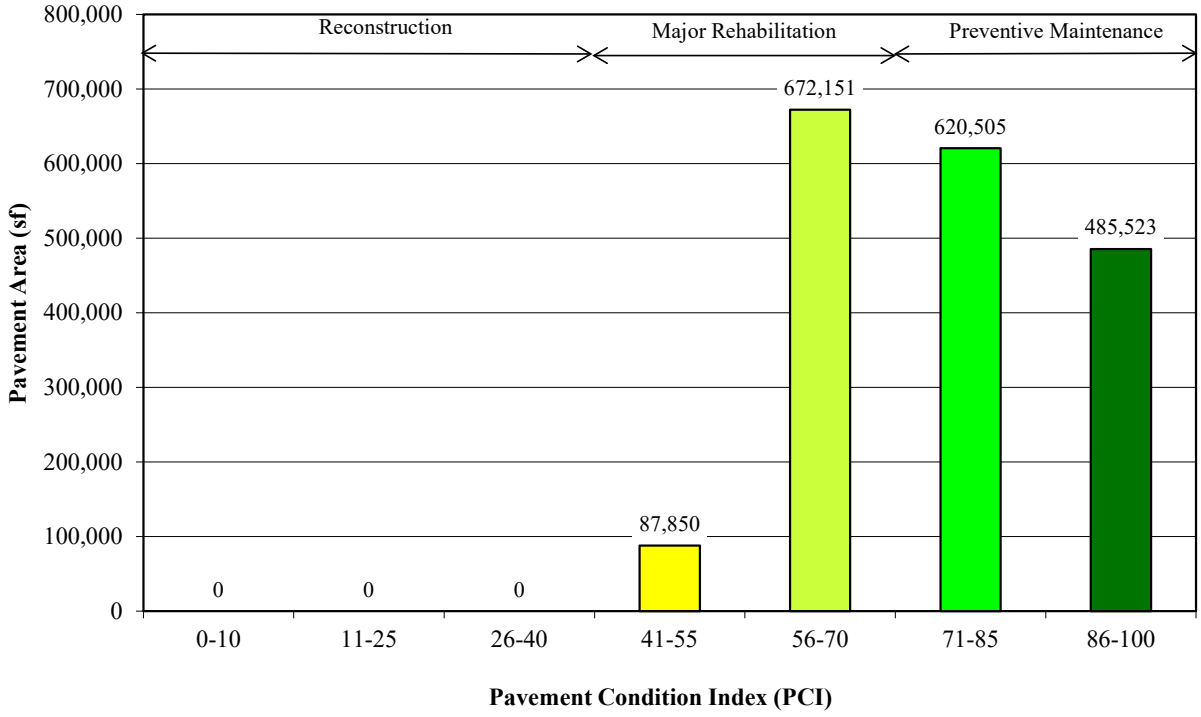


Figure 7. Area-weighted PCI by branch use at Ankeny Regional Airport.
(Values on chart are area-weighted)

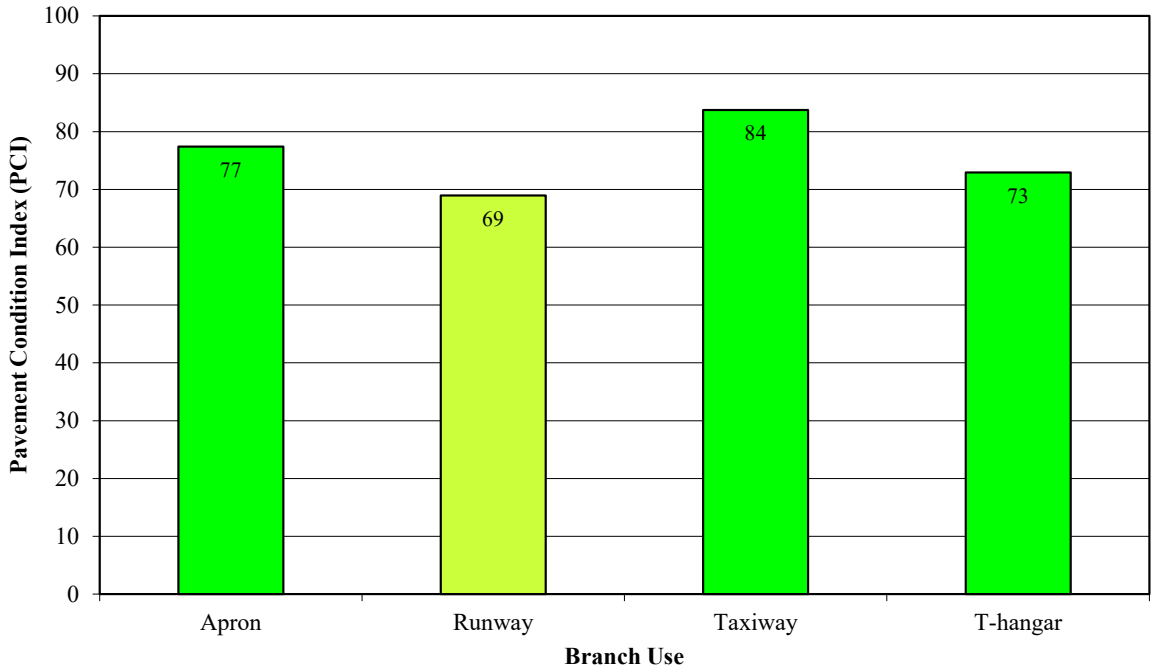
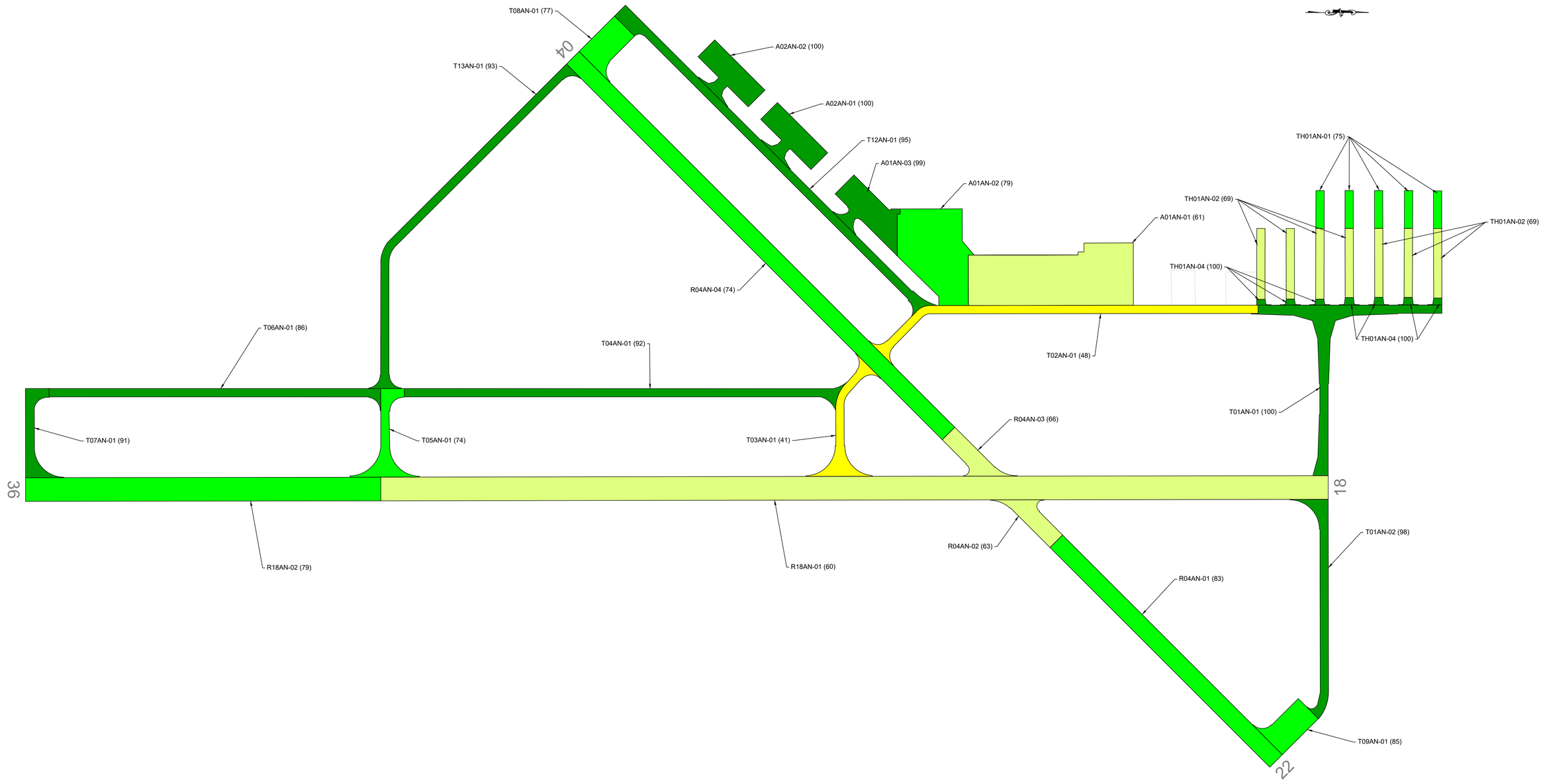


FIGURE 8. PCI MAP.



LEGEND

RW1533AL-10 (77)

BRANCH IDENTIFIER
SECTION IDENTIFIER
PCI VALUE

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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Modal Transportation Bureau - Aviation

LOCATION: Ankeny Regional Airport
Ankeny, Iowa

PAGE TITLE: 2021 Pavement Condition Index Map

PROJECT DATE:	CREATION DATE:	PROJECT MANAGER:	JOB NUMBER:
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1"=200'	APR. 2022	DSP	DSP
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Table 1. 2021 pavement evaluation results.

Branch	Section	Surface Type	Section Area (sf)	LCD	2021 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
A01AN	01	PCC	159,078	10/31/1993	61	22	12	66	ASR, Corner Break, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, LTD Cracking
A01AN	02	PCC	97,192	6/1/2006	79	4	43	53	ASR, Corner Spalling, Joint Seal Damage, LTD Cracking, Popouts
A01AN	03	PCC	40,780	7/1/2017	99	0	100	0	Joint Seal Damage
A02AN	01	PCC	34,619	4/3/2021	100	0	0	0	No Distresses
A02AN	02	PCC	34,619	10/3/2021	100	0	0	0	No Distresses
R04AN	01	PCC	98,351	10/30/1999	83	0	33	67	ASR, Corner Spalling, Faulting, Joint Seal Damage, Small Patch
R04AN	02	PCC	20,118	10/31/1993	63	0	4	96	ASR, Corner Spalling, Joint Seal Damage, Large Patch, Popouts, Small Patch
R04AN	03	PCC	20,724	10/31/1993	66	0	16	84	ASR, Faulting, Joint Seal Damage, Popouts, Small Patch
R04AN	04	PCC	168,335	10/30/1999	74	7	19	74	ASR, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch
R18AN	01	PCC	400,043	10/31/1993	60	24	11	65	ASR, Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch
R18AN	02	PCC	150,023	10/31/1998	79	25	24	51	ASR, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, LTD Cracking, Small Patch
T01AN	01	PCC	65,478	6/3/2020	100	0	0	0	No Distresses
T01AN	02	PCC	36,712	6/1/2002	98	0	100	0	Joint Seal Damage

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
T02AN	01	PCC	59,983	10/31/1993	48	34	8	58	ASR, Corner Break, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shattered Slab, Small Patch
T03AN	01	PCC	27,867	10/31/1993	41	37	8	55	ASR, Corner Break, Joint Spalling, Joint Seal Damage, LTD Cracking, Scaling, Small Patch
T04AN	01	PCC	64,988	10/3/1993	92	0	18	82	ASR, Corner Spalling, Joint Spalling, Joint Seal Damage, Small Patch
T05AN	01	PCC	25,338	10/31/1993	74	39	18	43	ASR, Corner Break, Joint Spalling, Joint Seal Damage, LTD Cracking, Small Patch
T06AN	01	PCC	50,244	10/31/1998	86	35	10	55	ASR, Corner Break, Joint Seal Damage, Large Patch, LTD Cracking, Popouts, Shrinkage Cracking, Small Patch
T07AN	01	PCC	20,730	10/30/1998	91	18	20	62	Corner Break, Corner Spalling, Faulting, Joint Seal Damage, Large Patch, Small Patch
T08AN	01	PCC	26,620	10/30/1998	77	12	47	41	ASR, Corner Spalling, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch
T09AN	01	PCC	26,675	10/30/1998	85	6	11	83	ASR, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch
T12AN	01	PCC	67,840	6/1/2002	95	52	29	19	Corner Spalling, Joint Seal Damage, Large Patch, LTD Cracking
T13AN	01	PCC	61,125	6/1/2003	93	0	100	0	Joint Seal Damage

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
TH01AN	01	PCC	27,971	7/2/2004	75	26	21	53	ASR, Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Popouts, Shattered Slab, Shrinkage Cracking, Small Patch
TH01AN	02	PCC	72,188	1/1/1995	69	55	29	16	ASR, Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Popouts, Shattered Slab, Small Patch
TH01AN	04	PCC	8,388	6/3/2020	100	0	0	0	No Distresses

Table Notes:

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

Inspection Comments

Ankeny Regional Airport was inspected on November 14, 2021. There were twenty-six 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 04/22 was defined by four sections. Section 01 contained low-severity ASR, faulting, and small patching; all severities of corner spalling; and medium-severity joint seal damage. Areas of low- and medium-severity ASR; low-severity corner spalling, joint seal damage, small patching, and large patching; and popouts were observed in Section 02. Section 03 had low- and medium-severity ASR, low-severity faulting and small patching, medium-severity joint seal damage, and popouts. Low- and high-severity ASR; low- and medium-severity corner spalling and joint spalling; low-severity faulting, large patching, and small patching; and medium-severity joint seal damage and longitudinal, transverse, and diagonal (LTD) cracking were recorded in Section 04.

Runway 18/36 consisted of two sections. Section 01 contained all severities of ASR; low-severity corner break, corner spalling, small patching, and large patching; medium-severity joint seal damage and joint spalling; and low- and medium-severity LTD cracking. Low-severity ASR, faulting, and joint spalling; medium-severity LTD cracking and joint seal damage; and low- and medium-severity corner spalling and small patching were recorded in Section 02.

Taxiways

Taxiway 01 connected the Runway 18 and 22 approaches to the apron area and contained two sections that were both in excellent condition. No distress was observed in Section 01, and only low-severity joint seal damage was recorded throughout Section 02.

Taxiway 02 was defined by one section that connected Runway 04/22 to Apron 01. Low- and medium-severity ASR; low-severity corner break, corner spalling, faulting, joint spalling, small patching, and large patching; and medium-severity joint seal damage, LTD cracking, and shattered slab were recorded in Section 01 during the inspection.

Taxiway 03 contained one section that connected Runway 18/36 to Runway 04/22. Section 01 contained all severities of ASR; low- and medium-severity corner break, LTD cracking, and small patching; medium-severity joint seal damage and scaling; and low-severity joint spalling.

Taxiway 04 consisted of one section that contained low-severity ASR and joint seal damage, low- and medium-severity corner spalling and joint spalling, and high-severity small patching.

Taxiway 05 was defined by one section that connected Runway 18/36 to the parallel taxiway. Areas of low- and medium-severity ASR; medium-severity corner break, LTD cracking, and joint seal damage; and low-severity joint spalling and small patching were observed in Section 01.

Taxiway 06 contained one section that had low-severity ASR, spall patching, large patching, joint seal damage, and LTD cracking; medium-severity corner break; popouts; and shrinkage cracking.

Taxiway 07 consisted of one section located near the Runway 36 approach that contained high-severity small patching and low-severity corner break, joint seal damage, large patching, faulting, and corner spalling.

Taxiway 08 was defined by one section located near the Runway 04 approach that had areas of low-severity ASR and small patching, low- and medium-severity corner spalling and large patching, medium- and high-severity joint seal damage, and medium-severity joint spalling and LTD cracking.

Taxiway 09 consisted of one section located near the Runway 22 approach that contained low-severity ASR, corner spalling, joint spalling, faulting, large patching, joint seal damage, LTD cracking, and small patching.

Taxiway 12 connected the Runway 04 approach to the apron area and was defined by one section. Low- and medium-severity LTD cracking and low-severity corner spalling, joint seal damage, and large patching were observed in Section 01.

Taxiway 13 consisted of one section that had medium-severity joint seal damage noted throughout.

Aprons

Apron 01 contained three sections. Section 01 contained low- and medium-severity ASR, corner break, and LTD cracking; all severities of corner spalling; low-severity faulting; and medium-severity joint seal damage and joint spalling. Low- and medium-severity ASR, medium-severity corner spalling, high-severity joint seal damage, low-severity LTD cracking, and popouts were recorded in Section 02. Section 03 was in excellent condition with only low-severity joint seal damage observed during the inspection.

Apron 02 consisted of two sections in excellent condition that had no distress noted at the time of inspection.

T-Hangar

The T-hangar area was defined by three sections. Section 01 contained low-severity ASR, corner break, corner spalling, joint spalling, shattered slab, large patching, small patching, and LTD cracking; medium-severity joint seal damage; popouts; and shrinkage cracking. Areas of low-severity ASR, large patching, and spall patching; low- and medium-severity corner break, LTD cracking, and joint spalling; medium-severity corner spalling and shattered slab; medium- and high-severity joint seal damage; and popouts were recorded in Section 02. Section 04 was in excellent condition with no distress during the inspection.

PAVEMENT MAINTENANCE AND REHABILITATION PROGRAM

Using the information collected during the pavement inspection, the PAVER pavement management software was used to develop a 5-year M&R program for Ankeny 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 Ankeny 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 Ankeny 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 Ankeny 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	A01AN	01	PCC	Preventive Maintenance	$233,498
2022	A01AN	02	PCC	Preventive Maintenance	$56,146
2022	R04AN	01	PCC	Preventive Maintenance	$48,253
2022	R04AN	02	PCC	Major Rehabilitation	$165,409
2022	R04AN	04	PCC	Preventive Maintenance	$104,195
2022	R18AN	01	PCC	Major Rehabilitation	$3,289,121
2022	R18AN	02	PCC	Preventive Maintenance	$70,026
2022	T02AN	01	PCC	Major Rehabilitation	$650,321
2022	T03AN	01	PCC	Major Rehabilitation	$480,815
2022	T04AN	01	PCC	Preventive Maintenance	$1,083
2022	T05AN	01	PCC	Preventive Maintenance	$15,195
2022	T06AN	01	PCC	Preventive Maintenance	$2,829
2022	T07AN	01	PCC	Preventive Maintenance	$154
2022	T08AN	01	PCC	Preventive Maintenance	$14,572
2022	T12AN	01	PCC	Preventive Maintenance	$118
2022	T13AN	01	PCC	Preventive Maintenance	$25,215
2022	TH01AN	01	PCC	Preventive Maintenance	$11,712
2022	TH01AN	02	PCC	Preventive Maintenance	$64,956
2023	R04AN	03	PCC	Major Rehabilitation	$177,207
				Total Estimated Cost:	**$5,411,000**

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 Ankeny Regional Airport.

The recommendations made in this report are based on a broad network-level analysis and meant to provide Ankeny 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 Ankeny 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, Ankeny 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 Ankeny 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, Ankeny 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 Ankeny 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 Ankeny 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 Ankeny 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
A01AN	01					
A01AN	02					
A01AN	03					
A02AN	01					
A02AN	02					
R04AN	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
R04AN	02					
R04AN	03					
R04AN	04					
R18AN	01					
R18AN	02					
T01AN	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
T01AN	02					
T02AN	01					
T03AN	01					
T04AN	01					
T05AN	01					
T06AN	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
T07AN	01					
T08AN	01					
T09AN	01					
T12AN	01					
T13AN	01					
TH01AN	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
TH01AN	02					
TH01AN	04					

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 Ankeny Regional Airport. A visual inspection of the pavements in 2021 found that the overall condition of the pavement network is a PCI of 75. A 5-year pavement repair program, shown in Table 2, was generated for Ankeny Regional Airport, which revealed that approximately $5,411,000 needs to be expended on M&R. Ankeny 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

A01AN-01. Overview.

A01AN-01. ASR (Sample Unit No. 11).

A01AN-01. ASR (Sample Unit No. 15).

A01AN-01. Joint Spalling (Sample Unit No. 30).

A01AN-02. Overview.

A01AN-02. ASR (Sample Unit No. 07).

A01AN-02. Popouts (Sample Unit No. 12).

A01AN-03. Overview.

A02AN-01. Overview.

A02AN-02. Overview.

R04AN-01. Overview.

R04AN-01. Corner Spalling (Sample Unit No. 01).

R04AN-01. Small Patching (Sample Unit No. 01).

R04AN-02. Overview.

R04AN-02. ASR (Sample Unit No. 02).

R04AN-02. ASR (Sample Unit No. 04).

R04AN-02. Popouts (Sample Unit No. 04).

R04AN-02. Small Patching (Sample Unit No. 02).

R04AN-03. Overview.

R04AN-03. ASR (Sample Unit No. 06).

R04AN-03. Small Patching (Sample Unit No. 06).

R04AN-04. Overview.

R04AN-04. ASR (Sample Unit No. 43).

R04AN-04. Small Patching (Sample Unit No. 43).

R18AN-01. Overview.

R18AN-01. ASR (Sample Unit No. 09).

R18AN-01. ASR (Sample Unit No. 27).

R18AN-01. ASR (Sample Unit No. 36).

R18AN-01. ASR (Sample Unit No. 81).

R18AN-01. Large Patching (Sample Unit No. 09).

R18AN-02. Overview.

R18AN-02. ASR (Sample Unit No. 06).

R18AN-02. Corner Spalling (Sample Unit No. 06).

T01AN-01. Overview (1).

T01AN-01. Overview (2).

T01AN-02. Overview.

T01AN-02. Joint Seal Damage (Sample Unit No. 12).

T02AN-01. Overview.

T02AN-01. ASR (Sample Unit No. 03) (1).

T02AN-01. ASR (Sample Unit No. 03) (2).

T02AN-01. ASR (Sample Unit No. 03) (3).

T02AN-01. LTD Cracking (Sample Unit No. 03).

T03AN-01. Overview.

T03AN-01. ASR (Sample Unit No. 02).

T03AN-01. LTD Cracking (Sample Unit No. 02).

T03AN-01. Small Patching (Sample Unit No. 02).

T04AN-01. Overview.

T04AN-01. Corner Spalling (Sample Unit No. 08).

T04AN-01. Small Patching (Additional Sample Unit No. 18).

T05AN-01. Overview.

T05AN-01. ASR (Sample Unit No. 05).

T05AN-01. LTD Cracking (Sample Unit No. 05).

T06AN-01. Overview.

T06AN-01. ASR (Sample Unit No. 15).

T06AN-01. LTD Cracking (Sample Unit No. 15).

T06AN-01. Large Patching (Sample Unit No. 15).

T07AN-01. Overview.

T07AN-01. Corner Break (Sample Unit No. 04).

T07AN-01. Faulting (Sample Unit No. 04).

T08AN-01. Overview.

T08AN-01. ASR (Sample Unit No. 04).

T08AN-01. LTD Cracking (Sample Unit No. 04).

T08AN-01. Small Patching (Sample Unit No. 04).

T09AN-01. Overview.

T09AN-01. Large Patching (Sample Unit No. 07).

T12AN-01. Overview.

T12AN-01. LTD Cracking (Sample Unit No. 06).

T13AN-01. Overview.

T13AN-01. Joint Seal Damage (Sample Unit No. 13).

TH01AN-01. Overview.

TH01AN-01. ASR (Sample Unit No. 04).

TH01AN-01. LTD Cracking (Sample Unit No. 09).

TH01AN-01. Small Patching (Sample Unit No. 09).

TH01AN-02. Overview.

TH01AN-02. LTD Cracking (Sample Unit No. 18).

TH01AN-02. Large Patching (Sample Unit No. 18).

TH01AN-02. Shattered Slab (Sample Unit No. 18).

TH01AN-04. Overview.

APPENDIX C

INSPECTION REPORT

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

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

Network ID: IKV

Branch - Section ID: A01AN - 01

Branch Name: APRON 01 Use: APRON

LCD: 10/31/1993
Surface Type: PCC
Rank: P
Section Area (sf): 159,078.00
Length (ft): 700.00
Width (ft): 233.00
From: T02AN
To: TERMINAL

PCI Family: IowaPCCAPSC

Slabs: 1,018
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 24,542.49

Section Comments:

Last Insp Date: 11/14/2021
PCI: 61
Total Samples: 45
Surveyed: 8

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 31
Sample Area (Slabs): 24

Sample Comments:

62 CORNER BREAK	M	3 Slabs
63 LINEAR CR	M	3 Slabs
65 JT SEAL DMG	M	24 Slabs
71 FAULTING	L	2 Slabs
76 ASR	L	14 Slabs
76 ASR	M	6 Slabs

Sample Number: 11

Sample Type: R
Sample PCI: 64
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
76 ASR	L	12 Slabs
76 ASR	M	2 Slabs

Sample Number: 15

Sample Type: R
Sample PCI: 63
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	M	1 Slabs
76 ASR	L	5 Slabs
76 ASR	M	2 Slabs

Sample Number: 19

Sample Type: R
Sample PCI: 76
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
76 ASR	L	14 Slabs

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Sample Number: 30

Sample Type: R
Sample PCI: 57
Sample Area (Slabs): 24

Sample Comments:

62 CORNER BREAK	L	1 Slabs
65 JT SEAL DMG	M	24 Slabs
71 FAULTING	L	2 Slabs
74 JOINT SPALL	M	1 Slabs
74 JOINT SPALL	M	2 Slabs
75 CORNER SPALL	H	1 Slabs
76 ASR	L	18 Slabs

Sample Number: 33

Sample Type: R
Sample PCI: 69
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
71 FAULTING	L	1 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	L	2 Slabs
75 CORNER SPALL	L	1 Slabs
76 ASR	L	7 Slabs

Sample Number: 36

Sample Type: R
Sample PCI: 48
Sample Area (Slabs): 24

Sample Comments:

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

Sample Number: 40

Sample Type: R
Sample PCI: 79
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
71 FAULTING	L	1 Slabs
76 ASR	L	5 Slabs

Branch - Section ID: A01AN - 02

Branch Name: APRON 01 Use: APRON

LCD: 6/1/2006
Surface Type: PCC
Rank: P
Section Area (sf): 97,192.00
Length (ft): 410.00
Width (ft): 275.00
From: A01AN-01
To: SEE MAP

PCI Family: IowaPCCAPSC

Slabs: 622
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 14,960.24

Section Comments:

Last Insp Date: 11/14/2021
PCI: 79
Total Samples: 34
Surveyed: 8

Inspection Comments:

Sample Number: 05

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
68 POPOUTS	N	4 Slabs
75 CORNER SPALL	M	1 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 70
Sample Area (Slabs): 20

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
68 POPOUTS	N	2 Slabs
76 ASR	L	1 Slabs
76 ASR	M	1 Slabs

Sample Number: 12

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

Sample Comments:

65 JT SEAL DMG	H	20 Slabs
68 POPOUTS	N	4 Slabs

Sample Number: 16

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

Sample Comments:

63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	H	20 Slabs
68 POPOUTS	N	4 Slabs
75 CORNER SPALL	M	1 Slabs
76 ASR	L	1 Slabs

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Sample Number: 19

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

65 JT SEAL DMG	H	20	Slabs
68 POPOUTS	N	2	Slabs

Sample Number: 21

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

65 JT SEAL DMG	H	20	Slabs
68 POPOUTS	N	2	Slabs

Sample Number: 25

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

65 JT SEAL DMG	H	20	Slabs

Sample Number: 32

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

65 JT SEAL DMG	H	20	Slabs
68 POPOUTS	N	2	Slabs

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Branch - Section ID: A01AN - 03

Branch Name: APRON 01 Use: APRON

LCD: 7/1/2017
Surface Type: PCC
Rank: P
Section Area (sf): 40,780.00
Length (ft): 325.00
Width (ft): 115.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCAPSC

Slabs: 338
Slab Length (ft): 11.50
Slab Width (ft): 10.50
Joint Length (ft): 6,949.81

Section Comments:

Last Insp Date: 11/14/2021
PCI: 99
Total Samples: 16
Surveyed: 6

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: 05

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

Sample Comments:

65 JT SEAL DMG	L	20 Slabs

Sample Number: 08

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

Sample Comments:

NO DISTRESS

Sample Number: 10

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

Sample Comments:

65 JT SEAL DMG	L	16 Slabs

Sample Number: 12

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

Sample Comments:

NO DISTRESS

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Branch - Section ID: A02AN - 01

Branch Name: APRON 02 Use: APRON

LCD: 4/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 34,619.00
Length (ft): 300.00
Width (ft): 100.00
From: TAXIWAY 12
To: END

PCI Family: IowaPCCAPSC

Slabs: 222
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 5,077.45

Section Comments:

Last Insp Date: 11/14/2021
PCI: 100
Total Samples: 10
Surveyed: 5

Inspection Comments:

Sample Number: 02

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

NO DISTRESS

Sample Comments:

Sample Number: 04

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

NO DISTRESS

Sample Comments:

Sample Number: 05

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

NO DISTRESS

Sample Comments:

Sample Number: 07

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

NO DISTRESS

Sample Comments:

Sample Number: 09

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

NO DISTRESS

Sample Comments:

Branch - Section ID: A02AN - 02

Branch Name: APRON 02 Use: APRON

LCD: 10/3/2021
Surface Type: PCC
Rank: P
Section Area (sf): 34,619.00
Length (ft): 300.00
Width (ft): 100.00
From: TAXIWAY 12
To: END

PCI Family: IowaPCCAPSC

Slabs: 222
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 5,077.45

Section Comments:

Last Insp Date: 11/14/2021
PCI: 100
Total Samples: 10
Surveyed: 5

Inspection Comments:

Sample Number: 02

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

Sample Comments:

NO DISTRESS

Sample Number: 04

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

Sample Comments:

NO DISTRESS

Sample Number: 05

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

Sample Comments:

NO DISTRESS

Sample Number: 07

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

Sample Comments:

NO DISTRESS

Sample Number: 09

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

Sample Comments:

NO DISTRESS

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Branch - Section ID: R04AN - 01

Branch Name: RUNWAY 04/22 Use: RUNWAY

LCD: 10/30/1999
Surface Type: PCC
Rank: S
Section Area (sf): 98,351.00
Length (ft): 1,313.00
Width (ft): 75.00
From: END RWY 22
To: R04AN

PCI Family: IowaPCCRWSC_Enhanced

Slabs: 629
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 14,349.91

Section Comments:

Last Insp Date: 11/14/2021
PCI: 83
Total Samples: 27
Surveyed: 7

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 81
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	5 Slabs
75 CORNER SPALL	H	1 Slabs
75 CORNER SPALL	M	2 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 83
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
71 FAULTING	L	2 Slabs
75 CORNER SPALL	L	3 Slabs

Sample Number: 10

Sample Type: R
Sample PCI: 84
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
75 CORNER SPALL	L	5 Slabs
75 CORNER SPALL	M	1 Slabs

Sample Number: 13

Sample Type: R
Sample PCI: 85
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
75 CORNER SPALL	L	2 Slabs
75 CORNER SPALL	M	2 Slabs

Sample Number: 16

Sample Type: R
Sample PCI: 85
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs
75 CORNER SPALL	M	3 Slabs

Sample Number: 21

Sample Type: R
Sample PCI: 77
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	5 Slabs
75 CORNER SPALL	M	3 Slabs
76 ASR	L	3 Slabs

Sample Number: 25

Sample Type: R
Sample PCI: 83
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	2 Slabs
75 CORNER SPALL	L	3 Slabs
75 CORNER SPALL	M	1 Slabs

Branch - Section ID: R04AN - 02

Branch Name: RUNWAY 04/22 Use: RUNWAY

LCD: 10/31/1993
Surface Type: PCC
Rank: S
Section Area (sf): 20,118.00
Length (ft): 263.00
Width (ft): 75.00
From: R04AN-01
To: RWY 18/36

PCI Family: IowaPCCRWSC_Enhanced

Slabs: 129
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 2,874.15

Section Comments:

Last Insp Date: 11/14/2021
PCI: 63
Total Samples: 7
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 64
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	L	18 Slabs
66 SMALL PATCH	L	2 Slabs
68 POPOUTS	N	6 Slabs
75 CORNER SPALL	L	2 Slabs
76 ASR	L	10 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 62
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
66 SMALL PATCH	L	10 Slabs
67 LARGE PATCH	L	2 Slabs
68 POPOUTS	N	6 Slabs
76 ASR	L	16 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 70
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
66 SMALL PATCH	L	12 Slabs
68 POPOUTS	N	6 Slabs
76 ASR	L	10 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 55
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24	Slabs
66 SMALL PATCH	L	8	Slabs
68 POPOUTS	N	6	Slabs
76 ASR	L	14	Slabs
76 ASR	M	2	Slabs

Branch - Section ID: R04AN - 03

Branch Name: RUNWAY 04/22 Use: RUNWAY

LCD: 10/31/1993
Surface Type: PCC
Rank: S
Section Area (sf): 20,724.00
Length (ft): 263.00
Width (ft): 75.00
From: RWY 18/36
To: R04AN-04

PCI Family: IowaPCCRWSC_Enhanced

Slabs: 133
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 2,960.72

Section Comments:

Last Insp Date: 11/14/2021
PCI: 66
Total Samples: 7
Surveyed: 4

Inspection Comments:

Sample Number: 04

Sample Type: R
Sample PCI: 61
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	7 Slabs
68 POPOUTS	N	2 Slabs
71 FAULTING	L	2 Slabs
76 ASR	L	16 Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 68
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	3 Slabs
68 POPOUTS	N	5 Slabs
71 FAULTING	L	2 Slabs
76 ASR	L	8 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 60
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	6 Slabs
76 ASR	L	14 Slabs
76 ASR	M	2 Slabs

Sample Number: 07

Sample Type: R
Sample PCI: 77
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	5 Slabs
76 ASR	L	8 Slabs

Branch - Section ID: R04AN - 04

Branch Name: RUNWAY 04/22 Use: RUNWAY

LCD: 10/30/1999
Surface Type: PCC
Rank: S
Section Area (sf): 168,335.00
Length (ft): 2,244.00
Width (ft): 75.00
From: R04AN-03
To: END RWY 04

PCI Family: IowaPCCRWSC_Enhanced

Slabs: 1,077
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 24,614.12

Section Comments:

Last Insp Date: 11/14/2021
PCI: 74
Total Samples: 46
Surveyed: 8

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 80
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	5 Slabs
67 LARGE PATCH	L	3 Slabs
75 CORNER SPALL	L	3 Slabs

Sample Number: 09

Sample Type: R
Sample PCI: 72
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	M	24 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	M	2 Slabs
76 ASR	L	3 Slabs

Sample Number: 14

Sample Type: R
Sample PCI: 76
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs
67 LARGE PATCH	L	1 Slabs
74 JOINT SPALL	L	1 Slabs
75 CORNER SPALL	L	1 Slabs
75 CORNER SPALL	M	5 Slabs

Sample Number: 17

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

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs
75 CORNER SPALL	L	2 Slabs
75 CORNER SPALL	M	3 Slabs

Sample Number: 21

Sample Type: R
Sample PCI: 75
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	4 Slabs
67 LARGE PATCH	L	2 Slabs
75 CORNER SPALL	L	2 Slabs
75 CORNER SPALL	M	3 Slabs

Sample Number: 28

Sample Type: R
Sample PCI: 74
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	4 Slabs
67 LARGE PATCH	L	1 Slabs
75 CORNER SPALL	L	2 Slabs
75 CORNER SPALL	M	5 Slabs

Sample Number: 36

Sample Type: R
Sample PCI: 76
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs
75 CORNER SPALL	M	6 Slabs
76 ASR	L	1 Slabs

Sample Number: 43

Sample Type: R
Sample PCI: 57
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	7 Slabs
71 FAULTING	L	1 Slabs
74 JOINT SPALL	L	1 Slabs
75 CORNER SPALL	L	2 Slabs
76 ASR	H	1 Slabs
76 ASR	L	4 Slabs

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Branch - Section ID: R18AN - 01

Branch Name: RUNWAY 18/36 Use: RUNWAY

LCD: 10/31/1993
Surface Type: PCC
Rank: P
Section Area (sf): 400,043.00
Length (ft): 4,000.00
Width (ft): 100.00
From: N END OF RWY 18/36
To: S END OF RWY 18/36

PCI Family: IowaPCCRWSC_Enhanced

Slabs: 2,560
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 59,906.44

Section Comments:

Last Insp Date: 11/14/2021
PCI: 60
Total Samples: 107
Surveyed: 11

Inspection Comments:

Sample Number: 009

Sample Type: R
Sample PCI: 79
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	2 Slabs
67 LARGE PATCH	L	1 Slabs
76 ASR	L	5 Slabs

Sample Number: 027

Sample Type: R
Sample PCI: 76
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	6 Slabs
75 CORNER SPALL	L	1 Slabs
76 ASR	L	7 Slabs

Sample Number: 036

Sample Type: R
Sample PCI: 64
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	12 Slabs
76 ASR	L	19 Slabs
76 ASR	M	1 Slabs

Sample Number: 045

Sample Type: R
Sample PCI: 51
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	L	1 Slabs
63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	6 Slabs
67 LARGE PATCH	L	2 Slabs
75 CORNER SPALL	L	1 Slabs
76 ASR	L	22 Slabs

Sample Number: 054

Sample Type: R
Sample PCI: 55
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	6 Slabs
76 ASR	L	14 Slabs
76 ASR	M	3 Slabs

Sample Number: 063

Sample Type: R
Sample PCI: 47
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	L	2 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	5 Slabs
67 LARGE PATCH	L	3 Slabs
76 ASR	L	12 Slabs
76 ASR	M	3 Slabs

Sample Number: 072

Sample Type: R
Sample PCI: 54
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	3 Slabs
66 SMALL PATCH	L	8 Slabs
67 LARGE PATCH	L	1 Slabs
74 JOINT SPALL	M	1 Slabs
76 ASR	L	20 Slabs

Sample Number: 081

Sample Type: R
Sample PCI: 29
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	L	2 Slabs
63 LINEAR CR	M	3 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	4 Slabs
67 LARGE PATCH	L	1 Slabs
76 ASR	H	2 Slabs
76 ASR	L	17 Slabs
76 ASR	M	1 Slabs

Sample Number: 090

Sample Type: R
Sample PCI: 67
Sample Area (Slabs): 24

Sample Comments:

62 CORNER BREAK	L	1 Slabs
63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	3 Slabs
76 ASR	L	13 Slabs

Sample Number: 099

Sample Type: R
Sample PCI: 48
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	6 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	4 Slabs
76 ASR	L	20 Slabs

Sample Number: 106

Sample Type: R
Sample PCI: 86
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
76 ASR	L	3 Slabs

Branch - Section ID: R18AN - 02

Branch Name: RUNWAY 18/36 Use: RUNWAY

LCD: 10/31/1998
Surface Type: PCC
Rank: P
Section Area (sf): 150,023.00
Length (ft): 1,500.00
Width (ft): 100.00
From: SOUTH END R18AN-O1
To: SOUTH END OF RWY 18/36

PCI Family: IowaPCCRWSC_Enhanced

Slabs: 960
Slab Length (ft): 12.50
Slab Width (ft): 12.50
Joint Length (ft): 22,403.43

Section Comments:

Last Insp Date: 11/14/2021
PCI: 79
Total Samples: 40
Surveyed: 8

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 84
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	7 Slabs
75 CORNER SPALL	L	4 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 79
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
74 JOINT SPALL	L	1 Slabs
75 CORNER SPALL	L	2 Slabs
75 CORNER SPALL	M	2 Slabs
76 ASR	L	1 Slabs

Sample Number: 12

Sample Type: R
Sample PCI: 92
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs

Sample Number: 20

Sample Type: R
Sample PCI: 90
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	4 Slabs

Sample Number: 21

Sample Type: R
Sample PCI: 71
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	3 Slabs
71 FAULTING	L	6 Slabs
75 CORNER SPALL	L	4 Slabs

Sample Number: 30

Sample Type: R
Sample PCI: 89
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs
75 CORNER SPALL	L	2 Slabs

Sample Number: 31

Sample Type: R
Sample PCI: 48
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	6 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	3 Slabs
71 FAULTING	L	6 Slabs
75 CORNER SPALL	L	4 Slabs

Sample Number: 39

Sample Type: R
Sample PCI: 76
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	9 Slabs
66 SMALL PATCH	M	1 Slabs
71 FAULTING	L	2 Slabs
76 ASR	L	1 Slabs

Branch - Section ID: T01AN - 01

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/3/2020
Surface Type: PCC
Rank: P
Section Area (sf): 65,478.00
Length (ft): 1,460.00
Width (ft): 35.00
From: NORTH END OF TWY 02
To: NORTH END OF RWY 18/36

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 759
Slab Length (ft): 10.00
Slab Width (ft): 8.63
Joint Length (ft): 12,219.41

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 100
Total Samples: 36
Surveyed: 8

Inspection Comments:

Sample Number: 02

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: 10

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

Sample Comments:

NO DISTRESS

Sample Number: 14

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): 24

Sample Comments:

NO DISTRESS

Sample Number: 27

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

Sample Comments:

NO DISTRESS

Sample Number: 30

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

Sample Comments:

NO DISTRESS

Sample Number: 33

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

Sample Comments:

NO DISTRESS

Branch - Section ID: T01AN - 02

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 6/1/2002
Surface Type: PCC
Rank: P
Section Area (sf): 36,712.00
Length (ft): 928.00
Width (ft): 35.00
From: R18AN-01
To: T09AN-01

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 252
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 4,997.03

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 98
Total Samples: 14
Surveyed: 6

Inspection Comments:

Sample Number: 05

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: 07

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

Sample Comments:

65 JT SEAL DMG	L	21 Slabs

Sample Number: 09

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

Sample Comments:

65 JT SEAL DMG	L	21 Slabs

Sample Number: 10

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

Sample Comments:

65 JT SEAL DMG	L	21 Slabs

Sample Number: 12

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

Sample Comments:

65 JT SEAL DMG	L	21 Slabs

Branch - Section ID: T02AN - 01

Branch Name: TAXIWAY 02 Use: TAXIWAY

LCD: 10/31/1993
Surface Type: PCC
Rank: P
Section Area (sf): 59,983.00
Length (ft): 1,685.00
Width (ft): 35.00
From: NORTH END OF TWY 02
To: T10AN-01

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 412
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 8,193.58

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 48
Total Samples: 18
Surveyed: 7

Inspection Comments:

Sample Number: 03

Sample Type: R
Sample PCI: 45
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	3 Slabs
66 SMALL PATCH	L	6 Slabs
76 ASR	L	19 Slabs
76 ASR	M	3 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 49
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	2 Slabs
76 ASR	L	13 Slabs
76 ASR	M	3 Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 45
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	4 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs
76 ASR	L	19 Slabs
76 ASR	M	2 Slabs

Sample Number: 11

Sample Type: R
Sample PCI: 51
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	1 Slabs
76 ASR	L	4 Slabs
76 ASR	M	5 Slabs

Sample Number: 12

Sample Type: R
Sample PCI: 61
Sample Area (Slabs): 24

Sample Comments:

62 CORNER BREAK	L	2 Slabs
65 JT SEAL DMG	M	24 Slabs
71 FAULTING	L	6 Slabs
74 JOINT SPALL	L	1 Slabs
75 CORNER SPALL	L	4 Slabs
76 ASR	L	5 Slabs

Sample Number: 14

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

Sample Comments:

63 LINEAR CR	M	12 Slabs
65 JT SEAL DMG	M	24 Slabs
67 LARGE PATCH	L	1 Slabs
71 FAULTING	L	2 Slabs
72 SHAT. SLAB	M	1 Slabs
74 JOINT SPALL	L	1 Slabs
76 ASR	L	3 Slabs

Sample Number: 16

Sample Type: R
Sample PCI: 52
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	9 Slabs
76 ASR	L	17 Slabs
76 ASR	M	3 Slabs

Branch - Section ID: T03AN - 01

Branch Name: TAXIWAY 03 Use: TAXIWAY

LCD: 10/31/1993
Surface Type: PCC
Rank: P
Section Area (sf): 27,867.00
Length (ft): 465.00
Width (ft): 35.00
From: T11AN-01
To: WEST EDGE OF RWY 18/36

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 191
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 3,763.20

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 41
Total Samples: 7
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 48
Sample Area (Slabs): 37

Sample Comments:

62 CORNER BREAK	L	1 Slabs
62 CORNER BREAK	M	3 Slabs
63 LINEAR CR	L	2 Slabs
63 LINEAR CR	M	5 Slabs
65 JT SEAL DMG	M	37 Slabs
66 SMALL PATCH	L	1 Slabs
74 JOINT SPALL	L	1 Slabs
76 ASR	H	1 Slabs
76 ASR	L	7 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 31
Sample Area (Slabs): 27

Sample Comments:

63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	M	27 Slabs
66 SMALL PATCH	L	5 Slabs
66 SMALL PATCH	M	2 Slabs
70 SCALING	M	1 Slabs
76 ASR	H	1 Slabs
76 ASR	L	20 Slabs
76 ASR	M	6 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 46
Sample Area (Slabs): 27

Sample Comments:

63 LINEAR CR	M	8 Slabs
65 JT SEAL DMG	M	27 Slabs
66 SMALL PATCH	L	4 Slabs
76 ASR	L	24 Slabs

Sample Number: 04

Sample Type: R

Sample PCI: 37

Sample Area (Slabs): 27

Sample Comments:

63 LINEAR CR	M	7	Slabs
65 JT SEAL DMG	M	27	Slabs
66 SMALL PATCH	L	13	Slabs
76 ASR	L	25	Slabs
76 ASR	M	2	Slabs

Branch - Section ID: T04AN - 01

Branch Name: TAXIWAY 04 Use: TAXIWAY

LCD: 10/3/1993
Surface Type: PCC
Rank: P
Section Area (sf): 64,988.00
Length (ft): 1,831.00
Width (ft): 35.00
From: T03AN
To: T05AN

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 446
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 8,880.33

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 92
Total Samples: 19
Surveyed: 8

Inspection Comments:

Sample Number: 03

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

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 06

Sample Type: R
Sample PCI: 95
Sample Area (Slabs): 24

Sample Comments:

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

Sample Number: 08

Sample Type: R
Sample PCI: 95
Sample Area (Slabs): 24

Sample Comments:

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

Sample Number: 11

Sample Type: R
Sample PCI: 92
Sample Area (Slabs): 24

Sample Comments:

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

Sample Number: 13

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

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Sample Number: 15

Sample Type: R
Sample PCI: 83
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
74 JOINT SPALL	L	2 Slabs
76 ASR	L	5 Slabs

Sample Number: 17

Sample Type: R
Sample PCI: 91
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
76 ASR	L	2 Slabs

Sample Number: 18

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

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
66 SMALL PATCH	H	2 Slabs
74 JOINT SPALL	M	2 Slabs
76 ASR	L	3 Slabs

Branch - Section ID: T05AN - 01

Branch Name: TAXIWAY 05 Use: TAXIWAY

LCD: 10/31/1993
Surface Type: PCC
Rank: P
Section Area (sf): 25,338.00
Length (ft): 375.00
Width (ft): 35.00
From: T04AN
To: RWY 18/36

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 174
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 3,408.60

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 74
Total Samples: 9
Surveyed: 5

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 64
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	M	24 Slabs
76 ASR	L	8 Slabs
76 ASR	M	1 Slabs

Sample Number: 02

Sample Type: R
Sample PCI: 72
Sample Area (Slabs): 25

Sample Comments:

62 CORNER BREAK	M	1 Slabs
63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	M	25 Slabs
66 SMALL PATCH	L	1 Slabs
74 JOINT SPALL	L	1 Slabs

Sample Number: 03

Sample Type: R
Sample PCI: 93
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	M	18 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 75
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	M	24 Slabs
76 ASR	L	9 Slabs

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Sample Number: 05

Sample Type: R
Sample PCI: 71
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	M	24 Slabs
76 ASR	L	8 Slabs

Branch - Section ID: T06AN - 01

Branch Name: TAXIWAY 06 Use: TAXIWAY

LCD: 10/31/1998
Surface Type: PCC
Rank: P
Section Area (sf): 50,244.00
Length (ft): 1,405.00
Width (ft): 35.00
From: T05AN
To: T07AN

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 345
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 6,857.31

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 86
Total Samples: 18
Surveyed: 7

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 77
Sample Area (Slabs): 18

Sample Comments:

62 CORNER BREAK	M	2 Slabs
65 JT SEAL DMG	L	18 Slabs
76 ASR	L	2 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 86
Sample Area (Slabs): 18

Sample Comments:

65 JT SEAL DMG	L	18 Slabs
76 ASR	L	4 Slabs

Sample Number: 06

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

Sample Comments:

65 JT SEAL DMG	L	18 Slabs

Sample Number: 09

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

Sample Comments:

65 JT SEAL DMG	L	18 Slabs

Sample Number: 12

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

Sample Comments:

65 JT SEAL DMG	L	18 Slabs
66 SMALL PATCH	L	1 Slabs
67 LARGE PATCH	L	6 Slabs

Sample Number: 15

Sample Type: R
Sample PCI: 69
Sample Area (Slabs): 18

Sample Comments:

63 LINEAR CR	L	4 Slabs
65 JT SEAL DMG	L	18 Slabs
67 LARGE PATCH	L	2 Slabs
68 POPOUTS	N	2 Slabs
76 ASR	L	1 Slabs

Sample Number: 17

Sample Type: R
Sample PCI: 90
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	L	2 Slabs
65 JT SEAL DMG	L	24 Slabs
73 SHRINKAGE CR	N	1 Slabs

Branch - Section ID: T07AN - 01

Branch Name: TAXIWAY 07 Use: TAXIWAY

LCD: 10/30/1998
Surface Type: PCC
Rank: P
Section Area (sf): 20,730.00
Length (ft): 438.00
Width (ft): 35.00
From: T06AN
To: RWY 18/36

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 142
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 2,796.66

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 91
Total Samples: 7
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 98
Sample Area (Slabs): 15

Sample Comments:

65 JT SEAL DMG	L	15 Slabs

Sample Number: 02

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

Sample Comments:

65 JT SEAL DMG	L	24 Slabs
67 LARGE PATCH	L	1 Slabs
75 CORNER SPALL	L	1 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 77
Sample Area (Slabs): 24

Sample Comments:

62 CORNER BREAK	L	2 Slabs
65 JT SEAL DMG	L	24 Slabs
66 SMALL PATCH	H	1 Slabs
71 FAULTING	L	2 Slabs
75 CORNER SPALL	L	2 Slabs

Sample Number: 05

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

Sample Comments:

65 JT SEAL DMG	L	24 Slabs

Branch - Section ID: T08AN - 01

Branch Name: TAXIWAY 08 Use: TAXIWAY

LCD: 10/30/1998
Surface Type: PCC
Rank: P
Section Area (sf): 26,620.00
Length (ft): 212.00
Width (ft): 120.00
From: T08AN
To: END RWY 04

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 177
Slab Length (ft): 12.50
Slab Width (ft): 12.00
Joint Length (ft): 4,000.53

Section Comments:

Last Insp Date: 11/14/2021
PCI: 77
Total Samples: 9
Surveyed: 5

Inspection Comments:

Sample Number: 03

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

Sample Comments:

63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	M	20 Slabs
75 CORNER SPALL	M	1 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 64
Sample Area (Slabs): 20

Sample Comments:

63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	M	20 Slabs
66 SMALL PATCH	L	6 Slabs
67 LARGE PATCH	L	9 Slabs
76 ASR	L	1 Slabs

Sample Number: 06

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

Sample Comments:

65 JT SEAL DMG	M	20 Slabs
66 SMALL PATCH	L	2 Slabs
67 LARGE PATCH	L	6 Slabs

Sample Number: 07

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

Sample Comments:

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

Sample Number: 08

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

Sample Comments:

65 JT SEAL DMG	H	20	Slabs
66 SMALL PATCH	L	2	Slabs
67 LARGE PATCH	L	1	Slabs
67 LARGE PATCH	M	1	Slabs

Branch - Section ID: T09AN - 01

Branch Name: TAXIWAY 09 Use: TAXIWAY

LCD: 10/30/1998
Surface Type: PCC
Rank: P
Section Area (sf): 26,675.00
Length (ft): 215.00
Width (ft): 120.00
From: T09AN
To: RWY 22

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 178
Slab Length (ft): 12.50
Slab Width (ft): 12.00
Joint Length (ft): 4,010.56

Section Comments:

Last Insp Date: 11/14/2021
PCI: 85
Total Samples: 10
Surveyed: 5

Inspection Comments:

Sample Number: 02

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

Sample Comments:

65 JT SEAL DMG	L	20 Slabs
66 SMALL PATCH	L	3 Slabs
67 LARGE PATCH	L	1 Slabs
76 ASR	L	2 Slabs

Sample Number: 03

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

Sample Comments:

65 JT SEAL DMG	L	20 Slabs
66 SMALL PATCH	L	2 Slabs
71 FAULTING	L	1 Slabs
74 JOINT SPALL	L	1 Slabs
75 CORNER SPALL	L	3 Slabs

Sample Number: 04

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

Sample Comments:

63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	L	20 Slabs
66 SMALL PATCH	L	2 Slabs
67 LARGE PATCH	L	3 Slabs
71 FAULTING	L	2 Slabs

Sample Number: 07

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

Sample Comments:

65 JT SEAL DMG	L	20 Slabs
66 SMALL PATCH	L	2 Slabs
67 LARGE PATCH	L	1 Slabs
71 FAULTING	L	3 Slabs

Sample Number: 08

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

Sample Comments:

65	JT SEAL DMG	L	16 Slabs

Branch - Section ID: T12AN - 01

Branch Name: TAXIWAY 12 Use: TAXIWAY

LCD: 6/1/2002
Surface Type: PCC
Rank: P
Section Area (sf): 67,840.00
Length (ft): 1,785.00
Width (ft): 35.00
From: T02AN-01
To: T08AN-01

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 485
Slab Length (ft): 12.00
Slab Width (ft): 11.66
Joint Length (ft): 9,495.22

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 95
Total Samples: 25
Surveyed: 7

Inspection Comments:

Sample Number: 03

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: 83
Sample Area (Slabs): 21

Sample Comments:

63 LINEAR CR	L	1 Slabs
63 LINEAR CR	M	1 Slabs
65 JT SEAL DMG	L	21 Slabs

Sample Number: 09

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

Sample Comments:

65 JT SEAL DMG	L	21 Slabs

Sample Number: 12

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

Sample Comments:

65 JT SEAL DMG	L	21 Slabs

Sample Number: 15

Sample Type: R
Sample PCI: 96
Sample Area (Slabs): 21

Sample Comments:

65 JT SEAL DMG	L	21 Slabs
75 CORNER SPALL	L	1 Slabs

Sample Number: 18

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

Sample Comments:

65 JT SEAL DMG	L	21	Slabs
67 LARGE PATCH	L	1	Slabs
75 CORNER SPALL	L	1	Slabs

Sample Number: 21

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

Sample Comments:

65 JT SEAL DMG	L	21	Slabs

Branch - Section ID: T13AN - 01

Branch Name: TAXIWAY 13 Use: TAXIWAY

LCD: 6/1/2003
Surface Type: PCC
Rank: P
Section Area (sf): 61,125.00
Length (ft): 1,678.00
Width (ft): 35.00
From: T06AN-01
To: R04AN-04

PCI Family: IowaPCCTWSC_Enhanced

Slabs: 419
Slab Length (ft): 12.50
Slab Width (ft): 11.66
Joint Length (ft): 8,349.43

Section Comments: slabs widths vary

Last Insp Date: 11/14/2021
PCI: 93
Total Samples: 21
Surveyed: 7

Inspection Comments:

Sample Number: 03

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

Sample Comments:

65 JT SEAL DMG	M	21 Slabs

Sample Number: 05

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

Sample Comments:

65 JT SEAL DMG	M	21 Slabs

Sample Number: 08

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

Sample Comments:

65 JT SEAL DMG	M	21 Slabs

Sample Number: 10

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

Sample Comments:

65 JT SEAL DMG	M	21 Slabs

Sample Number: 13

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

Sample Comments:

65 JT SEAL DMG	M	24 Slabs

Sample Number: 15

Sample Type: R
Sample PCI: 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

Branch - Section ID: TH01AN - 01

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

LCD: 7/2/2004
Surface Type: PCC
Rank: P
Section Area (sf): 27,971.00
Length (ft): 810.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SC&SW

Slabs: 193
Slab Length (ft): 12.50
Slab Width (ft): 11.60
Joint Length (ft): 3,815.27

Section Comments:

Last Insp Date: 11/14/2021
PCI: 75
Total Samples: 10
Surveyed: 5

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 63
Sample Area (Slabs): 21

Sample Comments:

65 JT SEAL DMG	M	21 Slabs
67 LARGE PATCH	L	1 Slabs
68 POPOUTS	N	4 Slabs
72 SHAT. SLAB	L	1 Slabs
73 SHRINKAGE CR	N	1 Slabs
74 JOINT SPALL	L	1 Slabs
75 CORNER SPALL	L	4 Slabs
76 ASR	L	3 Slabs

Sample Number: 04

Sample Type: R
Sample PCI: 72
Sample Area (Slabs): 18

Sample Comments:

63 LINEAR CR	L	2 Slabs
65 JT SEAL DMG	M	18 Slabs
68 POPOUTS	N	2 Slabs
74 JOINT SPALL	L	1 Slabs
75 CORNER SPALL	L	1 Slabs
76 ASR	L	1 Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 82
Sample Area (Slabs): 21

Sample Comments:

65 JT SEAL DMG	M	21 Slabs
66 SMALL PATCH	L	1 Slabs
68 POPOUTS	N	3 Slabs
75 CORNER SPALL	L	1 Slabs

Sample Number: 08

Sample Type: R
Sample PCI: 77
Sample Area (Slabs): 18

Sample Comments:

63 LINEAR CR	L	3 Slabs
65 JT SEAL DMG	M	18 Slabs
68 POPOUTS	N	3 Slabs

Sample Number: 09

Sample Type: R
Sample PCI: 81
Sample Area (Slabs): 21

Sample Comments:

62 CORNER BREAK	L	1 Slabs
63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	M	21 Slabs
66 SMALL PATCH	L	1 Slabs
75 CORNER SPALL	L	1 Slabs

Branch - Section ID: TH01AN - 02

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

LCD: 1/1/1995
Surface Type: PCC
Rank: P
Section Area (sf): 72,188.00
Length (ft): 2,100.00
Width (ft): 35.00
From: SEE MAP
To: SEE MAP

PCI Family: IowaPCCTH_SC&SW

Slabs: 429
Slab Length (ft): 14.50
Slab Width (ft): 11.60
Joint Length (ft): 9,104.70

Section Comments:

Last Insp Date: 11/14/2021
PCI: 69
Total Samples: 19
Surveyed: 7

Inspection Comments:

Sample Number: 02

Sample Type: R
Sample PCI: 37
Sample Area (Slabs): 24

Sample Comments:

62 CORNER BREAK	M	1 Slabs
63 LINEAR CR	L	1 Slabs
63 LINEAR CR	M	3 Slabs
65 JT SEAL DMG	M	24 Slabs
67 LARGE PATCH	L	1 Slabs
72 SHAT. SLAB	M	3 Slabs
76 ASR	L	1 Slabs

Sample Number: 05

Sample Type: R
Sample PCI: 83
Sample Area (Slabs): 24

Sample Comments:

65 JT SEAL DMG	H	24 Slabs
68 POPOUTS	N	3 Slabs

Sample Number: 08

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

Sample Comments:

65 JT SEAL DMG	M	24 Slabs

Sample Number: 10

Sample Type: R
Sample PCI: 57
Sample Area (Slabs): 14

Sample Comments:

62 CORNER BREAK	L	1 Slabs
63 LINEAR CR	M	2 Slabs
65 JT SEAL DMG	H	14 Slabs
68 POPOUTS	N	3 Slabs
74 JOINT SPALL	L	3 Slabs

Sample Number: 13

Sample Type: R
Sample PCI: 83
Sample Area (Slabs): 24

Sample Comments:

63 LINEAR CR	L	1 Slabs
65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	2 Slabs
74 JOINT SPALL	L	1 Slabs
74 JOINT SPALL	M	1 Slabs

Sample Number: 16

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

Sample Comments:

65 JT SEAL DMG	M	24 Slabs
66 SMALL PATCH	L	7 Slabs
74 JOINT SPALL	M	1 Slabs
75 CORNER SPALL	M	1 Slabs

Sample Number: 18

Sample Type: R
Sample PCI: 26
Sample Area (Slabs): 16

Sample Comments:

63 LINEAR CR	M	12 Slabs
65 JT SEAL DMG	M	16 Slabs
66 SMALL PATCH	L	2 Slabs
67 LARGE PATCH	L	2 Slabs
72 SHAT. SLAB	M	1 Slabs

RE-INSPECTION REPORT
ANKENY REGIONAL AIRPORT

Branch - Section ID: TH01AN - 04

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

LCD: 6/3/2020
Surface Type: PCC
Rank: P
Section Area (sf): 8,388.00
Length (ft): 175.00
Width (ft): 35.00
From:
To: cc:SEE MAP

PCI Family: IowaPCCTH_SC&SW

Slabs: 96
Slab Length (ft): 10.00
Slab Width (ft): 8.70
Joint Length (ft): 1,515.35

Section Comments:

Last Insp Date: 11/14/2021
PCI: 100
Total Samples: 7
Surveyed: 4

Inspection Comments:

Sample Number: 01

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 13

Sample Comments:

NO DISTRESS

Sample Number: 03

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 14

Sample Comments:

NO DISTRESS

Sample Number: 05

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 14

Sample Comments:

NO DISTRESS

Sample Number: 07

Sample Type: R
Sample PCI: 100
Sample Area (Slabs): 13

Sample Comments:

NO DISTRESS

APPENDIX D

WORK HISTORY REPORT

Work History

Pavement Database: IA 2021

Network: ANKENY REGIONAL AIRPORT

Branch - Section ID: A01AN - 01

LCD: 10/31/1993
Use: APRON
Rank: P
Surface: PCC

Length (ft): 700.00
Width (ft): 233.00
True Area (sf): 159,078.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NU-IN	New Construction - Initial	$0.00	6.00	True	6" P-501
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	6" P403 ATB
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P-155
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P-152

Branch - Section ID: A01AN - 02

LCD: 6/1/2006
Use: APRON
Rank: P
Surface: PCC

Length (ft): 410.00
Width (ft): 275.00
True Area (sf): 97,192.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2006	NC-PC	New Construction - PCC	$393,205.00	8.00	True	8" P-501
05-31-2006	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P-208
05-30-2006	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P152 Recompacted Subgrade

Branch - Section ID: A01AN - 03

LCD: 7/1/2017
Use: APRON
Rank: P
Surface: PCC

Length (ft): 325.00
Width (ft): 115.00
True Area (sf): 40,780.00

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

Branch - Section ID: A02AN - 01

LCD: 4/3/2021
Use: APRON
Rank: P
Surface: PCC

Length (ft): 300.00
Width (ft): 100.00
True Area (sf): 34,619.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
04-03-2021	NU-IN	New Construction - Initial	$0.00	7.00	True	7" PCC (IDOT CLASS C)
04-02-2021	SB-AG	Subbase - Aggregate	$0.00	6.00	False	6" MODIFIED SUBBASE
04-01-2021	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" COMPACTED SOBGRADE

Work History

Pavement Database: IA 2021

Branch - Section ID: A02AN - 02

LCD: 10/3/2021
Use: APRON
Rank: P
Surface: PCC

Length (ft): 300.00
Width (ft): 100.00
True Area (sf): 34,619.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
10-03-2021	NU-IN	New Construction - Initial	$0.00	7.00	True	7" PCC (IDOT CLASS C)
10-02-2021	SB-AG	Subbase - Aggregate	$0.00	6.00	False	6" MODIFIED SUBBASE
10-01-2021	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" COMPACTED SOBGRADE

Branch - Section ID: R04AN - 01

LCD: 10/30/1999
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 1,313.00
Width (ft): 75.00
True Area (sf): 98,351.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
11-01-2014	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
11-01-2014	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
10-30-1999	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P501 PCC
10-29-1999	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P208 ABC
10-28-1999	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" P152

Branch - Section ID: R04AN - 02

LCD: 10/31/1993
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 263.00
Width (ft): 75.00
True Area (sf): 20,118.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
11-01-2014	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
01-11-2014	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P501 PCC
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P403 ATB BASE
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P155 LIME-TREATED SUBGRADE
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P152; GEOTEXTILE PLACED BETWEEN P152

Work History

Pavement Database: IA 2021

Branch - Section ID: R04AN - 03

LCD: 10/31/1993
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 263.00
Width (ft): 75.00
True Area (sf): 20,724.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
11-01-2014	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
11-01-2014	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P501 PCC
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P403 ATB BASE
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P155 LIME-TREATED SUBGRADE
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P152; GEOTEXTILE PLACED BETWEEN P152

Branch - Section ID: R04AN - 04

LCD: 10/30/1999
Use: RUNWAY
Rank: S
Surface: PCC

Length (ft): 2,244.00
Width (ft): 75.00
True Area (sf): 168,335.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
11-01-2014	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	-
11-01-2014	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
11-01-2014	SL-PC	Slab Replacement - PCC	$0.00	0.00	False	-
10-30-1999	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P501 PCC
10-29-1999	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P208 ABC
10-28-1999	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12' P152 SUBGRADE

Branch - Section ID: R18AN - 01

LCD: 10/31/1993
Use: RUNWAY
Rank: P
Surface: PCC

Length (ft): 4,000.00
Width (ft): 100.00
True Area (sf): 400,043.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	SL-PC	Slab Replacement - PCC	$0.00	0.00	False	EST
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P501 PCC
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P403 ATB BASE
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P155 LIME-TREATED SUBGRADE
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P152; GEOTEXTILE PLACED BETWEEN P152

Work History

Pavement Database: IA 2021

Branch - Section ID: R18AN - 02

LCD: 10/31/1998
Use: RUNWAY
Rank: P
Surface: PCC

Length (ft): 1,500.00
Width (ft): 100.00
True Area (sf): 150,023.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1998	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T01AN - 01

LCD: 6/3/2020
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 1,460.00
Width (ft): 35.00
True Area (sf): 65,478.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2020	CR-PC	Complete Reconstruction - PCC	$300,150.00	8.00	True	8" P-501 PCC
06-02-2020	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P-219 RECYCLED AGG BASE
06-01-2020	SB-AG	Subbase - Aggregate	$0.00	12.00	False	12" AGG SUBBASE
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P501 PCC
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P403 ATB BASE
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P155 LIME-TREATED SUBGRADE
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P152; GEOTEXTILE PLACED BETWEEN P152

Branch - Section ID: T01AN - 02

LCD: 6/1/2002
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 928.00
Width (ft): 35.00
True Area (sf): 36,712.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
08-15-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
06-01-2002	NU-IN	New Construction - Initial	$0.00	6.00	True	6" P-501
05-31-2002	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P-208
05-30-2002	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" P-152

Work History

Pavement Database: IA 2021

Branch - Section ID: T02AN - 01

LCD: 10/31/1993
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 1,685.00
Width (ft): 35.00
True Area (sf): 59,983.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2020	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Fill incidental spalls with joint seal.
06-02-2020	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	-
06-01-2020	SL-PC	Slab Replacement - PCC	$0.00	0.00	False	-
06-01-2020	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P-501
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P403 ATB
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P-155
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P-152

Branch - Section ID: T03AN - 01

LCD: 10/31/1993
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 465.00
Width (ft): 35.00
True Area (sf): 27,867.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2020	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Crack seal
06-01-2020	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NC-PC	New Construction - PCC	$0.00	6.00	True	6" P-501
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P-403 ATB
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P-155
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P152

Branch - Section ID: T04AN - 01

LCD: 10/3/1993
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 1,831.00
Width (ft): 35.00
True Area (sf): 64,988.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-03-1993	NU-IN	New Construction - Initial	$0.00	6.00	True	6" P-501
10-02-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P403 ATB
10-01-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P-155
09-30-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P-152

Work History

Pavement Database: IA 2021

Branch - Section ID: T05AN - 01

LCD: 10/31/1993
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 375.00
Width (ft): 35.00
True Area (sf): 25,338.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	SL-PC	Slab Replacement - PCC	$0.00	0.00	False	EST
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1993	NU-IN	New Construction - Initial	$0.00	6.00	True	6" P-501
10-30-1993	BA-BI	Base Course - Bituminous	$0.00	4.00	False	4" P403 ATB
10-29-1993	SG-ST	Subgrade - Stabilized	$0.00	6.00	False	6" P-155
10-28-1993	SG-CO	Subgrade - Compacted	$0.00	6.00	False	6" P-152

Branch - Section ID: T06AN - 01

LCD: 10/31/1998
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 1,405.00
Width (ft): 35.00
True Area (sf): 50,244.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
06-01-2016	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	FIELD ESTIMATE
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-31-1998	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T07AN - 01

LCD: 10/30/1998
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 438.00
Width (ft): 35.00
True Area (sf): 20,730.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
09-20-2008	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	Federal Funding - Total Amount $401,102
09-20-2008	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	Federal Funding - Total Amount $401,102
10-30-1998	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T08AN - 01

LCD: 10/30/1998
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 212.00
Width (ft): 120.00
True Area (sf): 26,620.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	EST
11-01-2014	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
11-01-2014	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
10-30-1998	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Work History

Pavement Database: IA 2021

Branch - Section ID: T09AN - 01

LCD: 10/30/1998
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 215.00
Width (ft): 120.00
True Area (sf): 26,675.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
11-01-2014	SL-PC	Slab Replacement - PCC	$0.00	0.00	False	-
11-01-2014	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
11-01-2014	PA-PF	Patching - PCC Full Depth	$0.00	0.00	False	-
10-30-1998	NU-IN	New Construction - Initial	$0.00	0.00	True	-

Branch - Section ID: T12AN - 01

LCD: 6/1/2002
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 1,785.00
Width (ft): 35.00
True Area (sf): 67,840.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
11-01-2014	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
11-01-2014	SL-PC	Slab Replacement - PCC	$0.00	0.00	False	-
06-01-2002	NU-IN	New Construction - Initial	$0.00	6.00	True	6" P-501
05-31-2002	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P-208
05-30-2002	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" P-152

Branch - Section ID: T13AN - 01

LCD: 6/1/2003
Use: TAXIWAY
Rank: P
Surface: PCC

Length (ft): 1,678.00
Width (ft): 35.00
True Area (sf): 61,125.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2003	NU-IN	New Construction - Initial	$0.00	6.00	True	6" P-501
05-31-2003	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P-208
05-30-2003	SG-CO	Subgrade - Compacted	$0.00	12.00	False	12" P-152

Branch - Section ID: TH01AN - 01

LCD: 7/2/2004
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 810.00
Width (ft): 35.00
True Area (sf): 27,971.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2020	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	Crack seal
06-01-2020	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	localized
06-01-2020	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
07-02-2004	NC-PC	New Construction - PCC	$0.00	6.00	True	-
07-01-2004	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P-208 CABC

Work History

Pavement Database: IA 2021

Branch - Section ID: TH01AN - 02

LCD: 1/1/1995
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 2,100.00
Width (ft): 35.00
True Area (sf): 72,188.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2020	CS-PC	Crack Sealing - PCC	$0.00	0.00	False	-
06-02-2020	JS-LC	Joint Seal (Localized)	$0.00	0.00	False	-
06-01-2020	PA-PP	Patching - PCC Partial Depth	$0.00	0.00	False	-
01-01-1995	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

Branch - Section ID: TH01AN - 04

LCD: 6/3/2020
Use: T-HANGAR
Rank: P
Surface: PCC

Length (ft): 175.00
Width (ft): 35.00
True Area (sf): 8,388.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2020	CR-PC	Complete Reconstruction - PCC	$814,920.00	6.00	True	6" P-501 PCC
06-02-2020	BA-AG	Base Course - Aggregate	$0.00	6.00	False	6" P-219 RECYCLED AGG BASE
06-01-2020	SB-AG	Subbase - Aggregate	$0.00	12.00	False	12" AGG SUBBASE
01-01-1995	NC-PC	New Construction - PCC	$0.00	0.00	True	EST. VIA GE

APPENDIX E

LOCALIZED PREVENTIVE MAINTENANCE POLICIES AND UNIT COST TABLES

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

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

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

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

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

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

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

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

APPENDIX F

YEAR 2022 LOCALIZED PREVENTIVE MAINTENANCE DETAILS

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

Branch	Section	Distress Type	Severity	Distress Quantity	Distress Unit	Maintenance Action	Unit Cost	2022 Estimated Cost
A01AN	01	ASR	Medium	53	Slabs	Slab Replacement - PCC	$16.76	$138,848
A01AN	01	Corner Break	Low	5	Slabs	Crack Sealing - PCC	$3.02	$131
A01AN	01	Corner Break	Medium	16	Slabs	Patching - PCC Full Depth	$16.76	$8,609
A01AN	01	Corner Spalling	Medium	16	Slabs	Patching - PCC Partial Depth	$37.54	$1,607
A01AN	01	Corner Spalling	High	11	Slabs	Patching - PCC Partial Depth	$37.54	$1,071
A01AN	01	Joint Seal Damage	Medium	1,018	Slabs	Joint Seal (Localized)	$3.02	$74,118
A01AN	01	Joint Spalling	Medium	32	Slabs	Patching - PCC Partial Depth	$37.54	$7,713
A01AN	01	LTD Cracking	Medium	37	Slabs	Crack Sealing - PCC	$3.02	$1,401
A01AN	02	ASR	Medium	4	Slabs	Slab Replacement - PCC	$16.76	$10,180
A01AN	02	Corner Spalling	Medium	8	Slabs	Patching - PCC Partial Depth	$37.54	$785
A01AN	02	Joint Seal Damage	High	622	Slabs	Joint Seal (Localized)	$3.02	$45,180
R04AN	01	Corner Spalling	Medium	45	Slabs	Patching - PCC Partial Depth	$37.54	$4,539
R04AN	01	Corner Spalling	High	4	Slabs	Patching - PCC Partial Depth	$37.54	$378
R04AN	01	Joint Seal Damage	Medium	629	Slabs	Joint Seal (Localized)	$3.02	$43,337
R04AN	04	ASR	High	6	Slabs	Slab Replacement - PCC	$16.76	$14,690
R04AN	04	Corner Spalling	Medium	135	Slabs	Patching - PCC Partial Depth	$37.54	$13,600
R04AN	04	Joint Seal Damage	Medium	1,077	Slabs	Joint Seal (Localized)	$3.02	$74,334
R04AN	04	Joint Spalling	Medium	6	Slabs	Patching - PCC Partial Depth	$37.54	$1,360
R04AN	04	LTD Cracking	Medium	6	Slabs	Crack Sealing - PCC	$3.02	$212
R18AN	02	Corner Spalling	Medium	10	Slabs	Patching - PCC Partial Depth	$37.54	$1,010
R18AN	02	Joint Seal Damage	Medium	960	Slabs	Joint Seal (Localized)	$3.02	$67,658
R18AN	02	LTD Cracking	Medium	30	Slabs	Crack Sealing - PCC	$3.02	$1,133
R18AN	02	Small Patch	Medium	5	Slabs	Patching - PCC Full Depth	$16.76	$226
T04AN	01	Corner Spalling	Medium	5	Slabs	Patching - PCC Partial Depth	$37.54	$508

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
T04AN	01	Joint Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	$37.54	$485
T04AN	01	Small Patch	High	2	Slabs	Patching - PCC Full Depth	$16.76	$90
T05AN	01	ASR	Medium	2	Slabs	Slab Replacement - PCC	$16.76	$3,696
T05AN	01	Corner Break	Medium	2	Slabs	Patching - PCC Full Depth	$16.76	$819
T05AN	01	Joint Seal Damage	Medium	174	Slabs	Joint Seal (Localized)	$3.02	$10,294
T05AN	01	LTD Cracking	Medium	11	Slabs	Crack Sealing - PCC	$3.02	$386
T06AN	01	Corner Break	Medium	5	Slabs	Patching - PCC Full Depth	$16.76	$2,829
T07AN	01	Corner Break	Low	3	Slabs	Crack Sealing - PCC	$3.02	$81
T07AN	01	Small Patch	High	2	Slabs	Patching - PCC Full Depth	$16.76	$74
T08AN	01	Corner Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	$37.54	$179
T08AN	01	Joint Seal Damage	Medium	142	Slabs	Joint Seal (Localized)	$3.02	$9,665
T08AN	01	Joint Seal Damage	High	35	Slabs	Joint Seal (Localized)	$3.02	$2,416
T08AN	01	Joint Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	$37.54	$429
T08AN	01	Large Patch	Medium	2	Slabs	Patching - PCC Full Depth	$16.76	$1,752
T08AN	01	LTD Cracking	Medium	4	Slabs	Crack Sealing - PCC	$3.02	$131
T12AN	01	LTD Cracking	Medium	3	Slabs	Crack Sealing - PCC	$3.02	$118
T13AN	01	Joint Seal Damage	Medium	419	Slabs	Joint Seal (Localized)	$3.02	$25,215
TH01AN	01	Corner Break	Low	2	Slabs	Crack Sealing - PCC	$3.02	$48
TH01AN	01	Joint Seal Damage	Medium	193	Slabs	Joint Seal (Localized)	$3.02	$11,522
TH01AN	01	Shattered Slab	Low	2	Slabs	Crack Sealing - PCC	$3.02	$142
TH01AN	02	Corner Break	Low	3	Slabs	Crack Sealing - PCC	$3.02	$71
TH01AN	02	Corner Break	Medium	3	Slabs	Patching - PCC Full Depth	$16.76	$1,548
TH01AN	02	Corner Spalling	Medium	3	Slabs	Patching - PCC Partial Depth	$37.54	$289
TH01AN	02	Joint Seal Damage	Medium	320	Slabs	Joint Seal (Localized)	$3.02	$20,530

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
TH01AN	02	Joint Seal Damage	High	109	Slabs	Joint Seal (Localized)	$3.02	$6,966
TH01AN	02	Joint Spalling	Medium	6	Slabs	Patching - PCC Partial Depth	$37.54	$1,387
TH01AN	02	LTD Cracking	Medium	49	Slabs	Crack Sealing - PCC	$3.02	$1,916
TH01AN	02	Shattered Slab	Medium	11	Slabs	Slab Replacement - PCC	$16.76	$32,250

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 Ankeny Regional Airport.

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