Ottumwa Regional Airport

Pavement Management Report



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OTTUMWA REGIONAL AIRPORT PAVEMENT MANAGEMENT REPORT

Prepared For:



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Introduction July 2023

INTRODUCTION

Applied Pavement Technology, Inc. (APTech), with assistance from Robinson Engineering Company Consulting Engineers (Robinson), updated the Airport Pavement Management System (APMS) for the Iowa Department of Transportation, Modal Transportation Bureau (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 Ottumwa Regional Airport were assessed in November 2022 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.

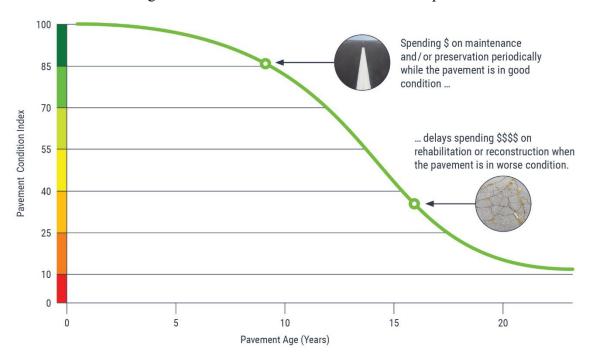


Figure 1. Pavement condition versus cost of repair.

Introduction July 2023

The pavement evaluation results for Ottumwa Regional Airport are presented within this report and can be used by Ottumwa 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 web-based interactive pavement data visualization tool IDEA, containing the information collected during this project, was updated and may be accessed from the Iowa DOT's website or directly (Iowa APMS IDEA).

Pavement Inventory July 2023

PAVEMENT INVENTORY

The project began with a review of the existing inventory information pertaining to the pavements at Ottumwa 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 2019.

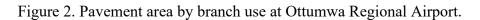
The pavement network at Ottumwa Regional Airport was then divided into branches, sections, and sample units. A branch is a single entity that serves a distinct function. For example, a runway is considered a branch because it serves a single function (allowing aircraft to take off and land). Taxiways and aprons 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 1,953,700 square feet of pavement were evaluated at Ottumwa 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 Ottumwa Regional Airport.

Pavement Inventory July 2023



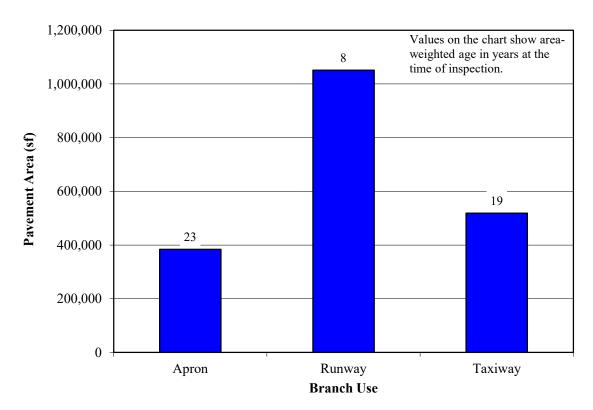


FIGURE 3. NETWORK DEFINITION MAP. – TBOT-04 (99) A01OT-02 (29) ┌ TAOT-05 (83) ┌ TAOT-02 (39) 08 11 10 09 08 07 06 05 TAOT-04 (54) ¬ TAOT-03 (57) ¬ _ TAOT-08 (97) ^{_} TAOT-06 (30) — TBOT-02 (61) ► TAOT-01 (73) R04OT-04 (97) **TAOT-07 (98)** - TBOT-07 (96) R13OT-01 (96) -__ TBOT-03 (100) applied pavement 115 W. Main Street, Suite 400 Urbana, IL 61801 Tel: 217-398-3977 Fax: 217-398-4027 **TECHNOLOGY** Iowa Department of Transportation NETWORK DEFINITION LEGEND Modal Transportation Bureau BRANCH IDENTIFIER SECTION IDENTIFIER PCI VALUE LOCATION: Ottumwa Regional Airport Ottumwa, Iowa R16ES-01 (88) SECTION BREAK LINE PAGE TITLE: Network Definition Map SAMPLE UNIT BREAK LINE CREATION DATE: OCT. 2022 PROJECT DATE: SLAB JOINT OCT. 2022 2021-125-AM01 SAMPLE UNIT NUMBER LAST MODIFIED DATE: RAWING SCALE: REVISED BY: MAY 2023 1"=300' SAMPLE UNIT INSPECTED LAYOUT NAME/NUMBER: PAGE NUMBER: ADDITIONAL SAMPLE UNIT NET. DEF. Ottumwa.dwg

PAVEMENT EVALUATION

Pavement Evaluation Procedure

APTech inspected the pavements at Ottumwa Regional Airport using the PCI procedure described in:

- FAA Advisory Circular 150/5380-6C, <u>Guidelines and Procedures for Maintenance of Airport Pavements</u>.
- FAA Advisory Circular 150/5380-7B, <u>Airport Pavement Management Program (PMP)</u>.
- 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.







PCI = 100

PCI = 59

PCI = 33

Note: Photographs shown are not specific to Ottumwa 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.

 PCI Range
 Repair

 86-100
 Preventive Maintenance

 56-70
 Major Rehabilitation

 26-40
 Reconstruction

 0-10
 O-10

Figure 5. PCI versus repair type.

The types of distress identified during the PCI inspection provide insight into the cause of pavement deterioration, which is useful when selecting M&R strategies. Understanding the cause of distress helps in selecting a rehabilitation alternative that corrects the cause and thus eliminates or delays its recurrence. PCI distress types are characterized as:

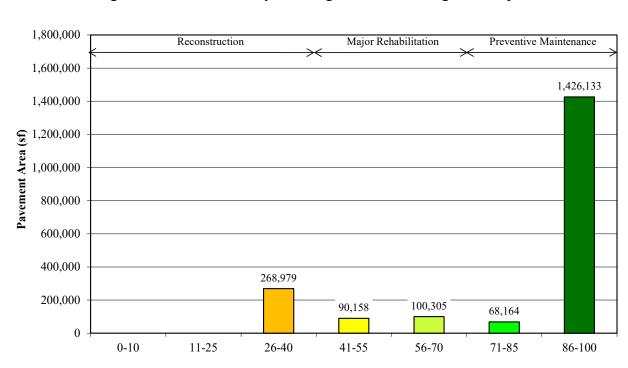
- Load-related—These distress types are defined as being caused by aircraft or vehicular traffic and may indicate a structural deficiency. Examples of load-related distress include alligator cracking on asphalt-surfaced pavements and corner breaks on portland cement concrete (PCC) pavements.
- Climate/durability-related—These distress types often signify the presence of aged or
 environmentally susceptible (or both) material and include durability-related issues.
 Examples of climate/durability-related distress include weathering on asphalt-surfaced
 pavements, which is climate-related, and durability cracking on PCC pavements, which is
 durability-related.
- Other—Distress types that fall into this category cannot be attributed solely to load or climate/durability. Examples of this type of distress include depressions on asphalt-surfaced pavements and shrinkage cracking on PCC pavements.

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 Ottumwa Regional Airport were inspected in November 2022. The 2022 area-weighted condition of Ottumwa Regional Airport is 82, with conditions ranging from 26 to 100 (on a scale of 0 [failed] to 100 [excellent]). During the previous pavement inspection in 2019, the area-weighted PCI of the airport was 91.

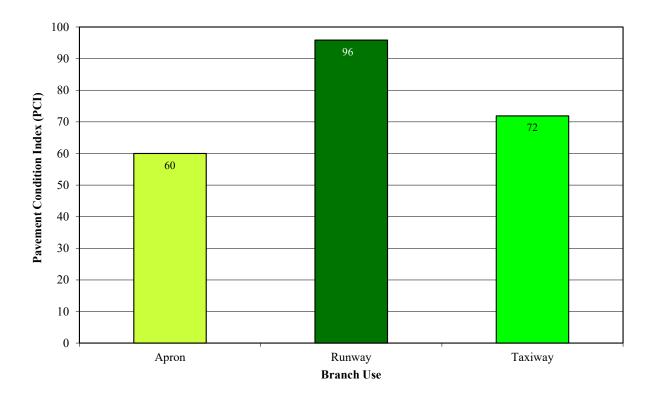
Figure 6 summarizes the overall condition of the pavements at Ottumwa Regional Airport, and Figure 7 presents area-weighted condition (average PCI adjusted to account for the relative size of the pavement sections) by branch use. Figure 8 is a map that displays the condition of the evaluated pavements. 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.



Pavement Condition Index (PCI)

Figure 6. Pavement area by PCI range at Ottumwa Regional Airport.

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



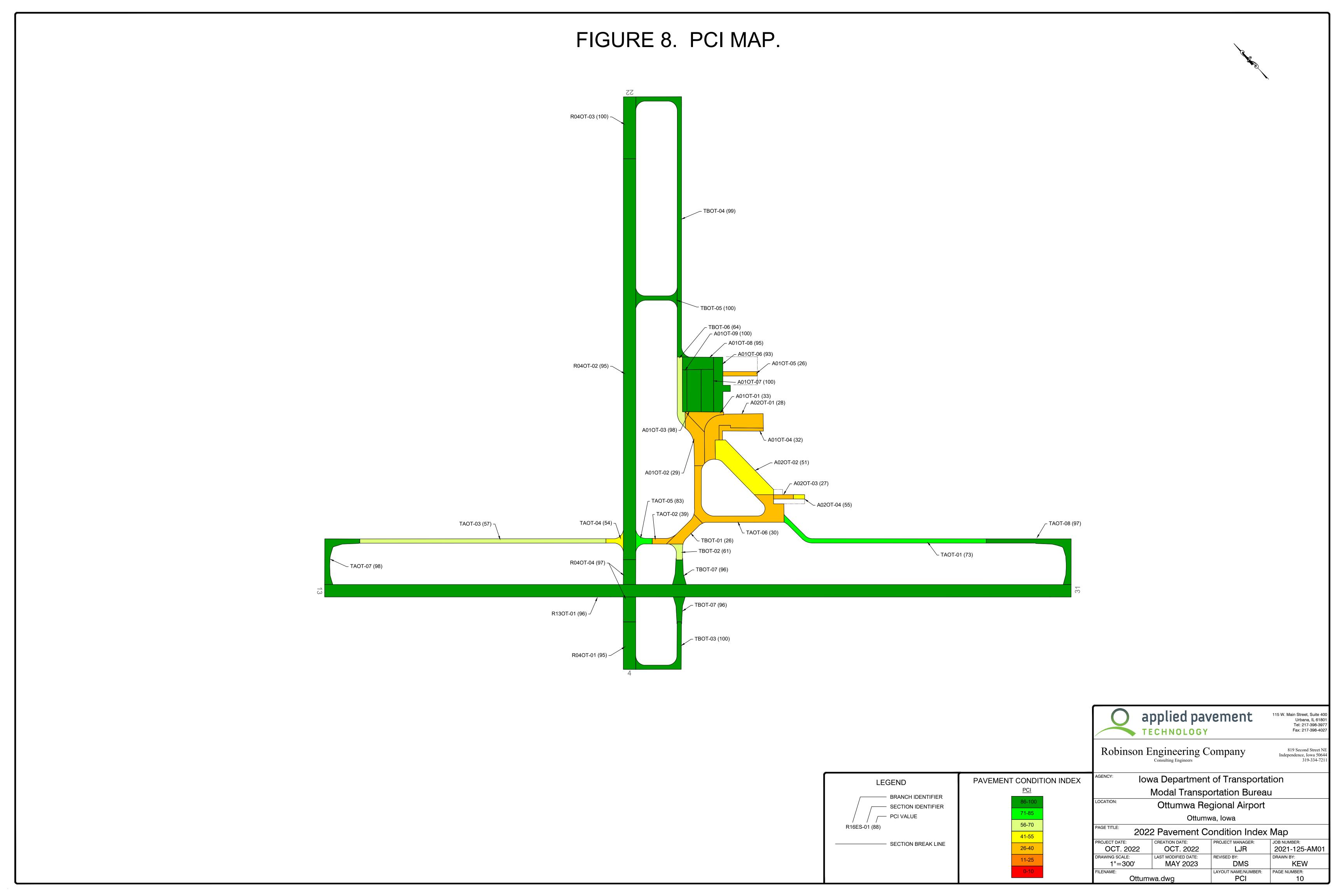


Table 1. 2022 pavement evaluation results.

Branch	Section	Surface Type	Section Area (sf)	LCD	2022 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
A01OT	01	AAC	20,450	6/1/2007	33	37	51	12	Alligator Cracking, Block Cracking, Patching, Shoving, Swelling, Weathering
A01OT	02	APC	35,525	6/30/1970	29	11	86	3	Alligator Cracking, Block Cracking, Depression, Joint Reflection Cracking, Swelling, Weathering
A01OT	03	PCC	38,700	4/3/2021	98	0	71	29	Joint Spalling, Joint Seal Damage
A01OT	04	APC	12,713	6/1/2007	32	21	63	16	Alligator Cracking, Block Cracking, Depression, Joint Reflection Cracking, L&T Cracking, Swelling, Weathering
A01OT	05	APC	9,713	1/1/1970	26	28	72	0	Alligator Cracking, Block Cracking, Joint Reflection Cracking, Weathering
A01OT	06	PCC	36,044	8/3/2018	93	13	81	6	Blowup, Corner Spalling, Joint Seal Damage, LTD Cracking
A01OT	07	PCC	34,176	8/3/2019	100	0	0	100	Joint Spalling
A01OT	08	PCC	25,031	8/3/2016	95	15	72	13	Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage
A01OT	09	PCC	12,163	4/3/2022	100	0	0	0	No distress
A02OT	01	APC	71,191	6/30/1970	28	25	75	0	Alligator Cracking, Block Cracking, Joint Reflection Cracking, Weathering
A02OT	02	AC	79,574	8/11/2001	51	44	52	4	Alligator Cracking, Depression, L&T Cracking, Raveling, Rutting, Weathering
A02OT	03	APC	5,600	2/11/1970	27	41	59	0	Alligator Cracking, L&T Cracking, Patching, Weathering
A02OT	04	APC	3,150	2/11/2012	55	36	64	0	Alligator Cracking, L&T Cracking, Weathering
R04OT	01	APC	37,912	8/1/2009	95	0	100	0	Joint Reflection Cracking

Pavement Evaluation

Table 1. 2022 pavement evaluation results (continued).

Branch	Section	Surface Type	Section Area (sf)	LCD	2022 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
R04OT	02	APC	322,356	8/1/2009	95	0	100	0	Joint Reflection Cracking
R04OT	03	AC	49,829	8/4/2009	100	0	0	0	No distress
R04OT	04	PCC	40,000	6/3/2018	97	0	52	48	ASR, Joint Seal Damage
R13OT	01	PCC	601,045	6/3/2018	96	23	42	35	Joint Spalling, Joint Seal Damage, LTD Cracking, Shrinkage Cracking
TAOT	01	AC	59,790	6/1/2004	73	0	100	0	L&T Cracking, Raveling, Weathering
TAOT	02	AC	6,507	5/1/2004	39	37	63	0	Alligator Cracking, L&T Cracking, Patching, Weathering
TAOT	03	AC	68,546	8/4/2002	57	51	48	1	Alligator Cracking, Depression, L&T Cracking, Rutting, Weathering
TAOT	04	AAC	7,434	8/1/2009	54	12	88	0	Alligator Cracking, L&T Cracking, Raveling, Weathering
TAOT	05	AAC	8,374	8/1/2009	83	31	61	8	Alligator Cracking, L&T Cracking, Patching, Swelling, Weathering
ТАОТ	06	APC	83,942	6/30/1970	30	26	65	9	Alligator Cracking, Block Cracking, Joint Reflection Cracking, L&T Cracking, Swelling, Weathering
TAOT	07	PCC	28,447	6/3/2018	98	0	100	0	Joint Seal Damage
TAOT	08	PCC	42,805	6/3/2018	97	0	73	27	Joint Spalling, Joint Seal Damage, Shrinkage Cracking
ТВОТ	01	APC	23,338	6/1/2006	26	21	79	0	Alligator Cracking, Block Cracking, Joint Reflection Cracking, L&T Cracking, Weathering
TBOT	02	AC	7,529	6/1/2004	61	0	66	34	L&T Cracking, Swelling, Weathering
TBOT	03	AC	27,004	8/4/2009	100	0	0	100	Swelling
TBOT	04	AC	88,287	8/4/2009	99	0	100	0	L&T Cracking
TBOT	05	AC	16,466	8/4/2009	100	0	0	0	No distress

Table 1. 2022 pavement evaluation results (continued).

Branch	Section	Surface Type	Section Area (sf)	LCD	2022 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
TBOT	06	APC	24,230	6/1/2015	64	15	62	23	Alligator Cracking, Depression, L&T Cracking, Patching, Weathering
ТВОТ	07	PCC	25,868	6/3/2018	96	0	41	59	Corner Spalling, Joint Spalling, Joint Seal Damage, Shrinkage Cracking

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

Ottumwa Regional Airport was inspected on November 14-15, 2022. There were thirty-three 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 areas of low-severity, unsealed joint reflection cracking. Section 02 was in excellent condition with low-severity, unsealed joint reflection cracking noted during the inspection. Section 03 was in excellent condition with no distress observed at the time of inspection. Section 04 was also in excellent condition with only low-severity ASR and joint seal damage recorded.

Runway 13/31 was defined by one section in excellent condition. Low-severity joint seal damage and longitudinal, transverse, and diagonal (LTD) cracking; low- and medium-severity joint spalling; and shrinkage cracking were noted in Section 01 during the inspection.

Taxiways

Taxiway A was defined by eight sections. Section 01 contained areas of low- and mediumseverity longitudinal and transverse (L&T) cracking, medium-severity raveling, and low-severity weathering. Section 02 was in poor condition with areas of medium- and high-severity alligator cracking, low- and medium-severity L&T cracking, high-severity patching, and low-severity weathering recorded. Low- and medium-severity L&T cracking and low-severity alligator cracking, depression, rutting, and weathering were observed in Section 03. Section 04 contained all severities of L&T cracking and low-severity raveling, weathering, and alligator cracking. Low- and medium-severity weathering and low-severity alligator cracking, L&T cracking, patching, and swelling were identified in Section 05. Section 06 was in poor condition with lowseverity weathering and block cracking; medium-severity alligator cracking and joint reflection cracking; and low- and medium-severity L&T cracking and swelling noted at the time of inspection. The low-severity cracking in Sections 01 through 06 was unsealed, and the mediumseverity cracking was due to either the development of secondary cracking, unsatisfactory crack sealant, or unsealed crack widths that exceeded ¼ in. Section 07 was in excellent condition with only low-severity joint seal damage identified throughout. Section 08 was also in excellent condition with shrinkage cracking and low-severity joint seal damage and joint spalling recorded.

Taxiway B was defined by seven sections. Section 01 was in poor condition with medium-severity joint reflection cracking and alligator cracking, low- and medium-severity block cracking, all severities of L&T cracking, and low-severity weathering recorded. Section 02 contained areas of low- and medium-severity L&T cracking, swelling, and weathering. Section 03 was in excellent condition with low-severity swelling noted during the inspection. Section 04 was also in excellent condition with low-severity, unsealed L&T cracking identified. Additionally, Section 05 was in excellent condition with no distress noted at the time of inspection. Low-severity patching, depression, and weathering; medium-severity alligator cracking; and low- and medium-severity L&T cracking were observed in Section 06. The low-severity cracking in Sections 01, 02, 04, and 06 was both sealed and unsealed, and the medium-

severity cracking was due to either the development of secondary cracking, unsatisfactory crack sealant, or unsealed crack widths greater than ¼ in. Section 07 was in excellent condition with low- and medium-severity corner spalling, low-severity joint seal damage, medium-severity joint spalling, and shrinkage cracking noted during the inspection.

Aprons

Apron 01 was defined by nine sections. Section 01 was in poor condition with low-severity patching and shoving; medium-severity weathering and block cracking; medium- and highseverity alligator cracking; and low- and medium-severity swelling noted during the inspection. Section 02 was also in poor condition with low-severity swelling, depression, and weathering; medium-severity alligator cracking and joint reflection cracking; and low- and medium-severity block cracking recorded. Section 03 was in excellent condition with low-severity joint seal damage and medium-severity joint spalling identified during the inspection. Section 04 was in poor condition with medium-severity alligator cracking, joint reflection cracking, and block cracking; low- and medium-severity depression, L&T cracking, and swelling; and low-severity weathering. Section 05 was also in poor condition with medium-severity alligator cracking, block cracking, joint reflection cracking, and weathering observed during the inspection. The low-severity cracking in Sections 01, 02, 04, and 05 was unsealed, and the medium-severity cracking was due to either the development of secondary cracking, unsatisfactory crack sealant, or unsealed crack widths that exceeded ¼ in. Areas of medium-severity corner spalling, low- and medium-severity joint seal damage, and low-severity blow-up and LTD cracking were identified in Section 06. Section 07 was in excellent condition with only an isolated area of mediumseverity joint spalling identified. Section 08 was also in excellent condition with low-severity corner break and low- and medium-severity joint seal damage noted during the inspection. An atypical area of medium-severity joint spalling and corner spalling was observed and recorded as an additional sample unit in accordance with ASTM D5340-20. Additionally, Section 09 was in excellent condition with no distress observed at the time of inspection.

Apron 02 was defined by four sections. Section 01 was in poor condition with medium-severity joint reflection cracking and alligator cracking, low- and medium-severity block cracking, and low-severity weathering recorded. Section 02 contained areas of low-severity raveling, depression, and rutting; low- and medium-severity weathering; medium-severity alligator cracking; and all severities of L&T cracking. The low-severity cracking in Sections 01 and 02 was unsealed, and the medium-severity cracking was due to either the development of secondary cracking, unsatisfactory crack sealant, or unsealed crack widths greater than ½ in. Section 03 was in poor condition with medium-severity patching and alligator cracking, low- and medium-severity L&T cracking, and low-severity weathering observed at the time of inspection. Areas of medium-severity alligator cracking, low- and medium-severity L&T cracking, and low-severity weathering were observed in Section 04.

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 Ottumwa 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.

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 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 Ottumwa 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, 2023 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 (2023) 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 2024 or 2025, then localized preventive maintenance was not recommended for 2023. While localized preventive maintenance should be an annual undertaking at Ottumwa 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 2023 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 Ottumwa Regional Airport is presented in Table 2. Detailed information on the recommended localized preventive maintenance plan for 2023 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
2023	A01OT	01	AAC	Major Rehabilitation	\$221,278
2023	A01OT	02	APC	Major Rehabilitation	\$384,395
2023	A01OT	03	PCC	Preventive Maintenance	\$697
2023	A01OT	04	APC	Major Rehabilitation	\$137,560
2023	A01OT	05	APC	Major Rehabilitation	\$105,099
2023	A01OT	06	PCC	Preventive Maintenance	\$8,943
2023	A01OT	07	PCC	Preventive Maintenance	\$553
2023	A01OT	08	PCC	Preventive Maintenance	\$3,061
2023	A02OT	01	APC	Major Rehabilitation	\$770,316
2023	A02OT	02	AC	Major Rehabilitation	\$418,296
2023	A02OT	03	APC	Major Rehabilitation	\$60,594
2023	A02OT	04	APC	Major Rehabilitation	\$16,128
2023	R13OT	01	PCC	Preventive Maintenance	\$2,425
2023	TAOT	01	AC	Preventive Maintenance	\$3,680
2023	TAOT	02	AC	Major Rehabilitation	\$70,408
2023	TAOT	03	AC	Major Rehabilitation	\$350,948
2023	TAOT	04	AAC	Major Rehabilitation	\$38,061
2023	TAOT	06	APC	Major Rehabilitation	\$908,287
2023	TBOT	01	APC	Major Rehabilitation	\$252,527
2023	TBOT	02	AC	Major Rehabilitation	\$38,548
2023	TBOT	07	PCC	Preventive Maintenance	\$403
2025	TBOT	06	APC	Major Rehabilitation	\$134,178

Total Estimated Cost: \$3,927,000

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 Ottumwa Regional Airport.

The recommendations made in this report are based on a broad network-level analysis and meant to provide Ottumwa 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 Ottumwa 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, Ottumwa 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 Ottumwa 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, Ottumwa Regional Airport will also need to undertake monthly driveby 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, and aprons at Ottumwa 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, and aprons are stored in the PAVER database. Appendix C provides information on length, width, and area. In addition, the network definition map provided in 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 Ottumwa Regional Airport is listed in Table 1 of this report and is also stored in the PAVER database. Any changes to the 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 Ottumwa 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
A01OT	01					
A01OT	02					
A01OT	03					
A01OT	04					
A01OT	05					
A01OT	06					

Table 3. Pavement inspection report (continued).

Inspected By:	
Date Inspected:	

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
A01OT	07					
A01OT	08					
A01OT	09					
A02OT	01					
A02OT	02					
A02OT	03					

Table 3. Pavement inspection report (continued).

Inspected By:	
Date Inspected:	

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
A02OT	04					
R04OT	01					
R04OT	02					
R04OT	03					
R04OT	04					
R13OT	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
ТАОТ	01					
ТАОТ	02					
ТАОТ	03					
ТАОТ	04					
ТАОТ	05					
ТАОТ	06					

Table 3. Pavement inspection report (continued).

Inspected By:	
Date Inspected:	

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
ТАОТ	07					
ТАОТ	08					
ТВОТ	01					
ТВОТ	02					
ТВОТ	03					
ТВОТ	04					

Table 3. Pavement inspection report (continued).

Inspected By:	
Date Inspected:	

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
ТВОТ	05					
ТВОТ	06					
ТВОТ	07					

Table Note: See Figure 3 for the location of the branch and section.

Summary July 2023

SUMMARY

This report documents the results of the pavement evaluation conducted at Ottumwa Regional Airport. A visual inspection of the pavements in 2022 found that the overall condition of the pavement network is a PCI of 82. A 5-year pavement repair program, shown in Table 2, was generated for Ottumwa Regional Airport, which revealed that approximately \$3,927,000 needs to be expended on M&R. Ottumwa 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

Cause of Distress Tables July 2023

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.

Cause of Distress Tables July 2023

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

A01OT-01. Overview.



A01OT-01. Alligator Cracking (Sample Unit No. 02).



A01OT-02. Overview.



A01OT-02. Block Cracking (Sample Unit No. 06).



A01OT-03. Overview.



A01OT-03. Joint Seal Damage (Sample Unit No. 10).



A01OT-03. Joint Spalling (Sample Unit No. 05).



A01OT-04. Overview.



A01OT-04. Swelling (Sample Unit No. 01).



A01OT-05. Overview.



A01OT-05. Alligator Cracking (Sample Unit No. 01).



A01OT-06. Overview.



A01OT-06. Blow-Up (Sample Unit No. 12).



A01OT-07. Overview.



A01OT-07. Joint Spalling (Sample Unit No. 04).



A01OT-08. Overview.



A01OT-08. Corner Break (Sample Unit No. 12).



A01OT-08. Joint Spalling (Additional Sample Unit No. 13).



A01OT-09. Overview.



A02OT-01. Overview.



A02OT-01. Block Cracking (Sample Unit No. 09).



A02OT-02. Overview.



A02OT-02. Alligator Cracking (Sample Unit No. 04).



A02OT-03. Overview.



A02OT-03. L&T Cracking (Sample Unit No. 01).



A02OT-04. Overview.



A02OT-04. Alligator Cracking (Sample Unit No. 01).



A02OT-04. L&T Cracking (Sample Unit No. 01).



R04OT-01. Overview.



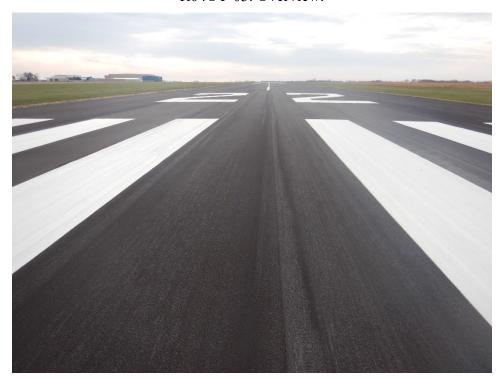
R04OT-02. Overview.



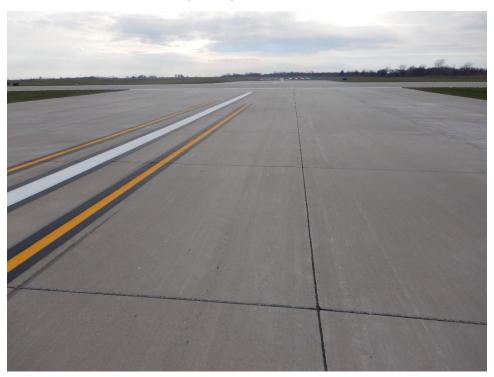
R04OT-02. Joint Reflection Cracking (Sample Unit No. 65).



R04OT-03. Overview.



R04OT-04. Overview.



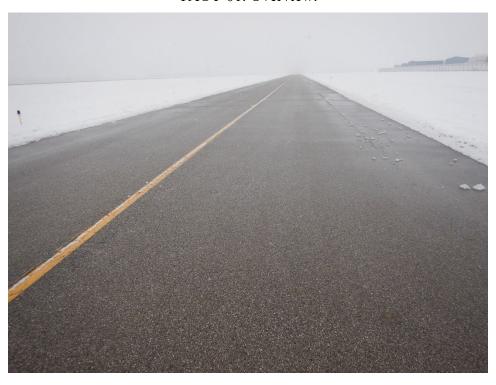
R13OT-01. Overview.



R13OT-01. Joint Spalling (Sample Unit No. 183).



TAOT-01. Overview.



TAOT-01. L&T Cracking (Sample Unit No. 04).



TAOT-01. Weathering (Sample Unit No. 04).



TAOT-02. Overview.



TAOT-02. Alligator Cracking (Sample Unit No. 01).



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



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



TAOT-03. Overview.



TAOT-03. Rutting (Sample Unit No. 11).



TAOT-04. Overview.



TAOT-04. L&T Cracking (Sample Unit No. 01).



TAOT-04. Weathering (Sample Unit No. 01).



TAOT-05. Overview.



TAOT-05. Swelling (Sample Unit No. 01).



TAOT-06. Overview.



TAOT-06. Alligator Cracking (Sample Unit No. 14).



TAOT-06. Block Cracking (Sample Unit No. 06).



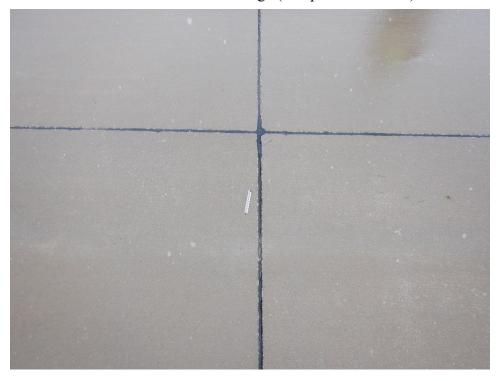
TAOT-06. Weathering (Sample Unit No. 06).



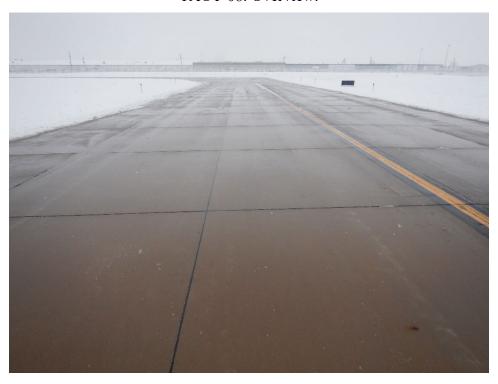
TAOT-07. Overview.



TAOT-07. Joint Seal Damage (Sample Unit No. 16).



TAOT-08. Overview.



TAOT-08. Joint Spalling (Sample Unit No. 02).



TBOT-01. Overview.



TBOT-01. Block Cracking (Sample Unit No. 02).



TBOT-02. Overview.



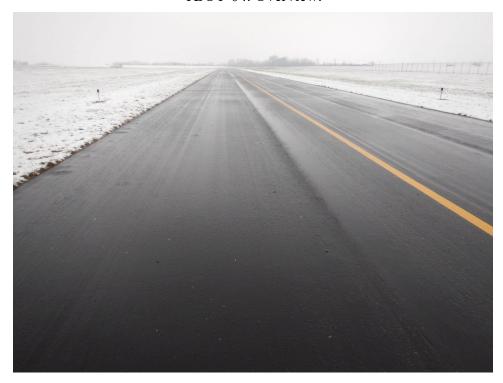
TBOT-02. Swelling (Sample Unit No. 02).



TBOT-03. Overview.



TBOT-04. Overview.



TBOT-04. L&T Cracking (Sample Unit No. 05).



TBOT-05. Overview.



TBOT-06. Overview.



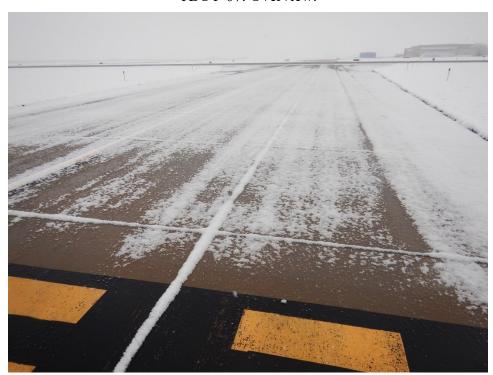
TBOT-06. Depression (Sample Unit No. 02).



TBOT-06. Patching (Additional Sample Unit No. 01).



TBOT-07. Overview.



APPENDIX C INSPECTION REPORT

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 1

Network ID: OTM			Page
	Branch - Section I	D: A01OT - 001	
Branch Name: NORTHEAST APRON			Use: APRO
LCD: 6/1/2007 Surface Type: AAC Rank: P Section Area (sf): 20,450.00 Length (ft): 230.00 Width (ft): 100.00 From: . To: .	PCI	Family: IowaAACAPSouthern	
Slabs: Slab Length (ft): Slab Width (ft): Joint Length (ft):	Secti	ion Comments:	
Last Insp Date: 11/14/2022 PCI: 33 Total Samples: 5 Surveyed: 4	Inspe	ection Comments:	
Sample Number: 01			
Sample Type: R Sample PCI: 24 Sample Area (SF): 4,808.00	Samı	ple Comments:	
41 ALLIGATOR CRACKING	Н	5.00 SF	
41 ALLIGATOR CRACKING	M	180.00 SF	
43 BLOCK CRACKING	M	4,611.00 SF	W, TYP. 7x7
50 PATCHING	L	12.00 SF	
54 SHOVING 57 WEATHERING	L M	40.00 SF 4,796.00 SF	
Sample Number: 02		1,700.00 01	
Sample Type: R Sample PCI: 25 Sample Area (SF): 5,490.00	Sam	ple Comments:	
41 ALLIGATOR CRACKING	M	190.00 SF	
43 BLOCK CRACKING	М	5,230.00 SF	
50 PATCHING	L .	70.00 SF	
56 SWELLING 56 SWELLING	L M	50.00 SF 50.00 SF	
57 WEATHERING	M	5,420.00 SF	
Sample Number: 03			
Sample Type: R Sample PCI: 37 Sample Area (SF): 3,000.00	Samı	ple Comments:	
43 BLOCK CRACKING	M	3,000.00 SF	
54 SHOVING	L L	25.00 SF	
57 WEATHERING	M	3,000.00 SF	
Sample Number: 04			
Sample Type: R Sample PCI: 51 Sample Area (SF): 4,850.00	Sam	ple Comments:	
40 DI 001/ 0D 401/INIC		0.000.00.00	

M

3,000.00 SF

4,850.00 SF

43 BLOCK CRACKING

57 WEATHERING

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 2

NCWOIK ID. O IW				i age z
Branch Name: NORTHEAST APRON	Branch - Section	on ID: A01OT - 002	Us	e: APRON
LCD: 6/30/1970 Surface Type: APC Rank: P Section Area (sf): 35,525.00 Length (ft): 400.00 Width (ft): 87.00 From: A01-01 To: TA-06		PCI Family: IowaAPCAPall		
Slabs: Slab Length (ft): Slab Width (ft): Joint Length (ft):		Section Comments:		
Last Insp Date: 11/14/2022 PCI: 29 Total Samples: 9 Surveyed: 4		Inspection Comments:		
Sample Number: 02				
Sample Type: R Sample PCI: 25 Sample Area (SF): 4,350.00		Sample Comments:		
41 ALLIGATOR CRACKING 43 BLOCK CRACKING 43 BLOCK CRACKING 45 DEPRESSION 47 JOINT REFLECTION CRACKING 57 WEATHERING	M L M L M L	35.00 SF 2,315.00 SF 2,000.00 SF 60.00 SF 500.00 Ft 4,350.00 SF	LU TYP 7X7 W, 2NDY, FS	
Sample Number: 04				
Sample Type: R Sample PCI: 28 Sample Area (SF): 4,350.00		Sample Comments:		
43 BLOCK CRACKING 43 BLOCK CRACKING 47 JOINT REFLECTION CRACKING 56 SWELLING 57 WEATHERING	L M M L L	2,350.00 SF 2,000.00 SF 500.00 Ft 50.00 SF 4,350.00 SF	W, FS	
Sample Number: 06				
Sample Type: R Sample PCI: 30 Sample Area (SF): 4,837.00		Sample Comments:		
43 BLOCK CRACKING 43 BLOCK CRACKING 47 JOINT REFLECTION CRACKING 57 WEATHERING	L M M L	2,175.00 SF 2,419.00 SF 600.00 Ft 4,837.00 SF	W, FS	

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 3

Sample Number: 08

Sample Type: R Sample Comments:

Sample PCI: 31

Sample Area (SF): 5,070.00

 43 BLOCK CRACKING
 L
 2,419.00 SF

 43 BLOCK CRACKING
 M
 2,535.00 SF

47 JOINT REFLECTION CRACKING M 500.00 Ft FS W

57 WEATHERING L 5,070.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM			Page 4
	Branch - Section ID	D: A01OT - 003	
Branch Name: NORTHEAST APRON			Use: APRON
LCD: 4/3/2021 Surface Type: PCC Rank: P Section Area (sf): 38,700.00 Length (ft): 338.00 Width (ft): 114.00 From: A01OT-002 To: End of A01OT	PCIF	amily: lowaPCCAPSE_CommEnhanced	
Slabs: 387 Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 7,286.03	Section	on Comments:	
Last Insp Date: 11/15/2022 PCI: 98 Total Samples: 17 Surveyed: 8	Inspec	ction Comments:	
Sample Number: 01			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 24.00 65 JOINT SEAL DAMAGE	Samp L	le Comments: 24.00 Slabs	
Sample Number: 03		21.00 Clabo	
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 24.00	Samp	le Comments:	
65 JOINT SEAL DAMAGE	L	24.00 Slabs	
Sample Number: 05 Sample Type: R Sample PCI: 95 Sample Area (Slabs): 24.00 65 JOINT SEAL DAMAGE 74 JOINT SPALL	Samp L M	le Comments: 24.00 Slabs 1.00 Slabs	
Sample Number: 08		1.00 0.000	
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 24.00 65 JOINT SEAL DAMAGE	Samp L	le Comments: 24.00 Slabs	
Sample Number: 10	L	ZT.UU Olaus	
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 24.00	Samp	le Comments:	
65 JOINT SEAL DAMAGE	L	24.00 Slabs	

Sample Number: 12

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 24.00

65 JOINT SEAL DAMAGE L 24.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 5

Sample Number: 14

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 24.00

65 JOINT SEAL DAMAGE L 24.00 Slabs

Sample Number: 17

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 24.00

65 JOINT SEAL DAMAGE L 24.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 6

Network ID: OTM				Page 6
Branch -	- Sect	ion ID: A01OT - 004		
Branch Name: NORTHEAST APRON			Use:	APRON
LCD: 6/1/2007 Surface Type: APC Rank: P Section Area (sf): 12,713.00 Length (ft): 365.00 Width (ft): 25.00 From: . To:		PCI Family: IowaAPCAPall		
Slabs: Slab Length (ft): Slab Width (ft): Joint Length (ft):		Section Comments:		
Last Insp Date: 11/14/2022 PCI: 32 Total Samples: 3 Surveyed: 3		Inspection Comments:		
Sample Number: 01				
Sample Type: R Sample PCI: 37 Sample Area (SF): 3,910.00		Sample Comments:		
41 ALLIGATOR CRACKING 45 DEPRESSION 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 56 SWELLING 56 SWELLING 57 WEATHERING	M L M L M	5.00 SF 55.00 SF 201.00 Ft 350.00 Ft 44.00 SF 20.00 SF 3,910.00 SF	LU W, 2NDY, FS	
Sample Number: 02				
Sample Type: R Sample PCI: 23 Sample Area (SF): 5,625.00		Sample Comments:		
41 ALLIGATOR CRACKING 43 BLOCK CRACKING 47 JOINT REFLECTION CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 56 SWELLING 56 SWELLING	M M L L	150.00 SF 3,938.00 SF 250.00 Ft 126.00 Ft 108.00 SF 40.00 SF	W FS LU	
Sample Number: 03				
Sample Type: R Sample PCI: 40 Sample Area (SF): 3,178.00		Sample Comments:		
45 DEPRESSION 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 56 SWELLING	M L M L	5.00 SF 125.00 Ft 470.00 Ft 20.00 SF	LU W, 2NDY, FS	

3,178.00 SF

57 WEATHERING

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 7

Branch - Section ID: A01OT - 005

Branch Name: NORTHEAST APRON Use: APRON

Surface Type: APC

LCD: 1/1/1970 Rank: P

Section Area (sf): 9,713.00

Length (ft): 250.00 Width (ft): 35.00

From: . To: .

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022

PCI: 26 Total Samples: 2 Surveyed: 2

Inspection Comments:

PCI Family: IowaAPCAPall

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 16

Sample Area (SF): 4,403.00

> 41 ALLIGATOR CRACKING 290.00 SF Μ

43 BLOCK CRACKING 4,085.00 SF FS,W, TYP 4x3 Μ

W, FS 47 JOINT REFLECTION CRACKING Μ 375.00 Ft

57 WEATHERING Μ 4.403.00 SF

Sample Number: 02

Sample Comments: Sample Type: R

Sample PCI: 34

Sample Area (SF): 5,310.00

> 43 BLOCK CRACKING Μ 5,310.00 SF

47 JOINT REFLECTION CRACKING 375.00 Ft W, FS Μ

57 WEATHERING 5,310.00 SF М

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 8

Network ID: OTM			Page 8
	Branch - Section	ID: A01OT - 006	
Branch Name: NORTHEAST APRON			Use: APRON
LCD: 8/3/2018 Surface Type: PCC Rank: P Section Area (sf): 36,044.00 Length (ft): 445.00 Width (ft): 75.00 From: . To: .	PC	CI Family: IowaPCCAPSE_CommEnhanced	
Slabs: 288 Slab Length (ft): 12.50 Slab Width (ft): 10.00 Joint Length (ft): 5,926.34		ection Comments:	
Last Insp Date: 11/14/2022 PCI: 93 Total Samples: 16 Surveyed: 6	ln:	spection Comments:	
Sample Number: 02			
Sample Type: R Sample PCI: 93 Sample Area (Slabs): 15.00 65 JOINT SEAL DAMAGE	L	ample Comments: 15.00 Slabs	
75 CORNER SPALL	M	1.00 Slabs	
Sample Number: 04			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 18.00 65 JOINT SEAL DAMAGE	Sa L	ample Comments: 18.00 Slabs	
Sample Number: 06		10.00 Glabs	
Sample Type: R Sample PCI: 93 Sample Area (Slabs): 18.00 65 JOINT SEAL DAMAGE	Sa M	ample Comments: 18.00 Slabs	
Sample Number: 10			
Sample Type: R Sample PCI: 89 Sample Area (Slabs): 18.00	Sa	ample Comments:	
63 LINEAR CRACKING 65 JOINT SEAL DAMAGE	L L	2.00 Slabs 18.00 Slabs	
Sample Number: 12	L	10.00 01000	
Sample Type: R Sample PCI: 84 Sample Area (Slabs): 18.00	Sa	ample Comments:	

1.00 Slabs

18.00 Slabs

61 BLOW-UP

65 JOINT SEAL DAMAGE

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 9

Sample Number: 14

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 24.00

65 JOINT SEAL DAMAGE L 24.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 10

Branch - Section ID: A01OT - 007

Use: APRON Branch Name: NORTHEAST APRON

LCD: 8/3/2019 Surface Type: PCC

Rank: P

Section Area (sf): 34,176.00

Length (ft): 343.00 Width (ft): 100.00

From: . To: .

Slabs: 342

Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 6,393.80

Last Insp Date: 11/14/2022

PCI: 100 Total Samples: 17 Surveyed: 7

Sample Number: 02

Sample Type: R Sample PCI: 100

Sample Area (Slabs): 24.00

NO DISTRESS

Sample Number: 04

Sample Type: R

Sample PCI: 97

Sample Area (Slabs): 24.00

74 JOINT SPALL

Sample Number: 06

Sample Type: R Sample PCI: 100

Sample Area (Slabs): 24.00

NO DISTRESS

Sample Number: 08

Sample Type: R Sample PCI: 100

Sample Area (Slabs): 24.00

NO DISTRESS

Sample Number: 11

Sample Type: R

Sample PCI: 100 Sample Area (Slabs): 20.00

NO DISTRESS

Sample Number: 13

Sample Type: R

Sample PCI: 100 Sample Area (Slabs): 20.00

NO DISTRESS

PCI Family: IowaPCCAPSE CommEnhanced

Section Comments:

Inspection Comments:

Sample Comments:

Sample Comments:

Μ

1.00 Slabs

Sample Comments:

Sample Comments:

Sample Comments:

Sample Comments:

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 11

Sample Number: 15

Sample Type: R Sample PCI: 100

Sample Area (Slabs): 20.00

NO DISTRESS

Sample Comments:

Pavement Database: IA 2022 Generate Date: 6/14/2023

1 avoinont Batabaco. I/ Cozz		Contrato Bato. of	1 1/2020
Network ID: OTM			Page 12
	Branch - Section	on ID: A01OT - 008	
Branch Name: NORTHEAST APRON		Use:	APRON
LCD: 8/3/2016 Surface Type: PCC Rank: P Section Area (sf): 25,031.00 Length (ft): 280.00 Width (ft): 100.00 From: . To: .		PCI Family: lowaPCCAPSE_CommEnhanced	
Slabs: 280 Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 5,220.00	:	Section Comments:	
Last Insp Date: 11/14/2022 PCI: 95 Total Samples: 14 Surveyed: 7		Inspection Comments:	
Sample Number: 01			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00 65 JOINT SEAL DAMAGE	L.	Sample Comments: 20.00 Slabs	
Sample Number: 04	L	20.00 Slabs	
•		Samuela Camara anta	
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00	•	Sample Comments:	
65 JOINT SEAL DAMAGE	L	20.00 Slabs	
Sample Number: 05			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00		Sample Comments:	
65 JOINT SEAL DAMAGE	L	20.00 Slabs	
Sample Number: 08			
Sample Type: R Sample PCI: 94 Sample Area (Slabs): 20.00		Sample Comments:	
62 CORNER BREAK	L L	1.00 Slabs	
65 JOINT SEAL DAMAGE Sample Number: 09	L	20.00 Slabs	
•		Sample Comments:	
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00	•	Sample Comments:	
65 JOINT SEAL DAMAGE	L	20.00 Slabs	
Sample Number: 12			

Sample Type: R Sample Comments:

Sample PCI: 87

Sample Area (Slabs): 20.00

62 CORNER BREAK 2.00 Slabs L 65 JOINT SEAL DAMAGE 20.00 Slabs Μ

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 13

Sample Number: 13

Sample Type: A Sample Comments:

Sample PCI: 90

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs 74 JOINT SPALL M 1.00 Slabs 75 CORNER SPALL M 1.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 14

Branch - Section ID: A01OT - 009

Branch Name: NORTHEAST APRON

Use: APRON

LCD: 4/3/2022

Surface Type: PCC

Rank: P

Section Area (sf): 12,163.00

Length (ft): 338.00 Width (ft): 36.00 From: SEE MAP To: SEE MAP

Slabs: 122 Section Comments:

Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 2,058.75

Last Insp Date: 11/15/2022 Inspection Comments:

PCI: 100 Total Samples: 7 Surveyed: 4

Sample Number: 02

Sample Type: R

Sample PCI: 100

Sample Area (Slabs): 20.00

NO DISTRESS

Sample Number: 03

Sample Type: R Sample PCI: 100

Sample Area (Slabs): 20.00

....

NO DISTRESS

Sample Number: 05

Sample Type: R Sample PCI: 100

Sample Area (Slabs): 20.00

NO DISTRESS

Sample Number: 06

Sample Type: R

Sample PCI: 100

Sample Area (Slabs): 20.00

NO DISTRESS

PCI Family: IowaPCCAPSE CommEnhanced

Sample Comments:

Sample Comments:

Sample Comments:

Sample Comments:

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 15

	5 1 6 4	ID 4000T 004		
Branch Name: TERMINAL APRON	Branch - Secti	on ID: A02OT - 001		Use: APRON
LCD: 6/30/1970 Surface Type: APC Rank: P Section Area (sf): 71,191.00 Length (ft): 700.00 Width (ft): 75.00 From: NORTH END OF TERM BLDG To: SOUTH END OF TERM BLDG		PCI Family: IowaAPCAPall		
Slabs: Slab Length (ft): Slab Width (ft): Joint Length (ft):		Section Comments:		
Last Insp Date: 11/14/2022 PCI: 28 Total Samples: 16 Surveyed: 5		Inspection Comments:		
Sample Number: 02				
Sample Type: R Sample PCI: 23 Sample Area (SF): 4,250.00		Sample Comments:		
41 ALLIGATOR CRACKING 43 BLOCK CRACKING 43 BLOCK CRACKING 47 JOINT REFLECTION CRACKING 57 WEATHERING	M L M M L	150.00 SF 3,100.00 SF 1,000.00 SF 600.00 Ft 4,250.00 SF	W, FS	
Sample Number: 04				
Sample Type: R Sample PCI: 22 Sample Area (SF): 4,250.00 41 ALLIGATOR CRACKING 43 BLOCK CRACKING	M L	Sample Comments: 200.00 SF 3,050.00 SF	LU TYP 5X5	
43 BLOCK CRACKING 47 JOINT REFLECTION CRACKING 57 WEATHERING	M M L	1,000.00 SF 600.00 Ft 4,250.00 SF	FS W	
Sample Number: 09				
Sample Type: R Sample PCI: 32 Sample Area (SF): 5,625.00		Sample Comments:		
41 ALLIGATOR CRACKING 43 BLOCK CRACKING 43 BLOCK CRACKING	M L M	50.00 SF 4,575.00 SF 1,000.00 SF		
47 JOINT REFLECTION CRACKING	M	600.00 Ft	W, FS	

5,625.00 SF

57 WEATHERING

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 16

Sample Number: 11

Sample Type: R Sample Comments:

Sample PCI: 29

Sample Area (SF): 4,500.00

> 50.00 SF 41 ALLIGATOR CRACKING Μ 43 BLOCK CRACKING L 3,450.00 SF 43 BLOCK CRACKING Μ 1,000.00 SF

47 JOINT REFLECTION CRACKING Μ 600.00 Ft W, FS L 4,500.00 SF

57 WEATHERING

Sample Number: 13

Sample Type: R Sample Comments:

Sample PCI: 32

Sample Area (SF): 4,500.00

> 43 BLOCK CRACKING L 3,500.00 SF 43 BLOCK CRACKING 1,000.00 SF Μ

47 JOINT REFLECTION CRACKING Μ 600.00 Ft W, FS

57 WEATHERING L 4,500.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 17

Branch - Section ID: A02OT - 002 Branch Name: TERMINAL APRON Use: APRON LCD: 8/11/2001 PCI Family: IowaACAPSouthern Surface Type: AC Rank: P Section Area (sf): 79,574.00 Length (ft): 640.00 Width (ft): 140.00 From: A02OT-01 To: .. Slabs: Section Comments: Slab Length (ft): Slab Width (ft): Joint Length (ft): Last Insp Date: 11/14/2022 Inspection Comments: PCI: 51 Total Samples: 17 Surveyed: 5 Sample Number: 04 Sample Type: R Sample Comments: Sample PCI: 34 Sample Area (SF): 5,000.00 200.00 SF 41 ALLIGATOR CRACKING Μ 45 DEPRESSION L 35.00 SF 48 LONGITUDINAL/TRANSVERSE CRACKING L 83.00 Ft LU 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 330.00 Ft W, 2NDY, FS 53 RUTTING L 115.00 SF 57 WEATHERING L 5,000.00 SF Sample Number: 06 Sample Type: R Sample Comments: Sample PCI: 54 Sample Area (SF): 4,000.00 45 DEPRESSION L 15.00 SF

Sample Number: 08

Sample Type: R Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING

48 LONGITUDINAL/TRANSVERSE CRACKING

Sample PCI: 65

Sample Area (SF): 5,000.00

57 WEATHERING

45 DEPRESSION 30.00 SF L 48 LONGITUDINAL/TRANSVERSE CRACKING M 262.00 Ft W, 2NDY, FS

Н

Μ

L

1 FT

W, 2NDY, FS

17.00 Ft

336.00 Ft

4,000.00 SF

5,000.00 SF **57 WEATHERING** L

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 18

Sample	Number:	10
--------	---------	----

Sample Type: R Sample Comments:

Sample PCI: 43

Sample Area (SF): 5,000.00

41 ALLIGATOR CRACKING	M	35.00 SF
45 DEPRESSION	L	50.00 SF

48 LONGITUDINAL/TRANSVERSE CRACKING M 410.00 Ft W, 2NDY, FS

 52 RAVELING
 L
 30.00 SF

 53 RUTTING
 L
 45.00 SF

 57 WEATHERING
 L
 4,940.00 SF

 57 WEATHERING
 M
 30.00 SF

Sample Number: 14

Sample Type: R Sample Comments:

Sample PCI: 58

Sample Area (SF): 5,000.00

45 DEPRESSION L 6.00 SF 48 LONGITUDINAL/TRANSVERSE CRACKING L 16.00 Ft

48 LONGITUDINAL/TRANSVERSE CRACKING M 475.00 Ft W, 2NDY, FS

LU

57 WEATHERING L 5,000.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 19

Branch - Section ID: A02OT - 003

Branch Name: TERMINAL APRON

Use: APRON

LCD: 2/11/1970 Surface Type: APC

Rank: P

Section Area (sf): 5,600.00

Length (ft): 160.00 Width (ft): 35.00

From: . To: .

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022

PCI: 27 Total Samples: 1 Surveyed: 1 Inspection Comments:

PCI Family: IowaAPCAPall

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 27

Sample Area (SF): 5,600.00

41 ALLIGATOR CRACKING M 325.00 SF
48 LONGITUDINAL/TRANSVERSE CRACKING L 320.00 Ft
48 LONGITUDINAL/TRANSVERSE CRACKING M 793.00 Ft
50 PATCHING M 5.00 SF
57 WEATHERING L 5,595.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 20

Branch - Section ID: A02OT - 004

PCI Family: IowaAPCAPall

Branch Name: TERMINAL APRON

Use: APRON

LCD: 2/11/2012 Surface Type: APC

Rank: P

Section Area (sf): 3,150.00

Length (ft): 90.00 Width (ft): 35.00 From: SEE MAP To: SEE MAP

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022 Inspection Comments:

PCI: 55 Total Samples: 1 Surveyed: 1

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 55

Sample Area (SF): 3,150.00

41 ALLIGATOR CRACKING M 25.00 SF edge

48 LONGITUDINAL/TRANSVERSE CRACKING L 143.00 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING M 177.00 Ft 57 WEATHERING L 3,150.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 21

Branch - Section ID: R04OT - 001

PCI Family: IowaAPCRWSouthern

Branch Name: RUNWAY 04/22 Use: RUNWAY

LCD: 8/1/2009 Surface Type: APC

Rank: S

Section Area (sf): 37,912.00

Length (ft): 554.00 Width (ft): 100.00 From: 04 APPROACH To: RUNWAY 13/31

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022 Inspection Comments:

PCI: 95 Total Samples: 8 Surveyed: 4

Sample Number: 02

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (SF): 5,000.00

47 JOINT REFLECTION CRACKING L 129.00 Ft LU

Sample Number: 04

Sample Type: R Sample Comments:

Sample PCI: 94

Sample Area (SF): 5,000.00

47 JOINT REFLECTION CRACKING L 98.00 Ft LU

Sample Number: 06

Sample Type: R Sample Comments:

Sample PCI: 95

Sample Area (SF): 5,000.00

47 JOINT REFLECTION CRACKING L 84.00 Ft LU

Sample Number: 07

Sample Type: R Sample Comments:

Sample PCI: 97

Sample Area (SF): 5,000.00

47 JOINT REFLECTION CRACKING L 48.00 Ft LU

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 22

PCI Family: IowaAPCRWSouthern

Inspection Comments:

Branch - Section ID: R04OT - 002

Use: RUNWAY Branch Name: RUNWAY 04/22

LCD: 8/1/2009

Surface Type: APC

Rank: S

Section Area (sf): 322,356.00

Length (ft): 3,223.00 Width (ft): 100.00 From: RUNWAY 13/31 To: 22 APPROACH

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022

PCI: 95

Total Samples: 65 Surveyed: 7

Sample Number: 11

Sample Type: R Sample Comments:

Sample PCI: 92

Sample Area (SF): 5,000.00

47 JOINT REFLECTION CRACKING L 148.00 Ft LU

Sample Number: 20

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (SF): 5,000.00

> 47 JOINT REFLECTION CRACKING L 42.00 Ft LU

Sample Number: 30

Sample Type: R Sample Comments:

Sample PCI: 94

Sample Area (SF): 5,000.00

> LU 47 JOINT REFLECTION CRACKING 105.00 Ft

Sample Number: 38

Sample Comments: Sample Type: R

Sample PCI: 92

Sample Area (SF): 5,000.00

> 47 JOINT REFLECTION CRACKING 146.00 Ft LU

Sample Number: 47

Sample Type: R Sample Comments:

Sample PCI: 99

Sample Area (SF): 5,000.00

47 JOINT REFLECTION CRACKING L 21.00 Ft LU

Sample Number: 56

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (SF): 5.000.00

> 47 JOINT REFLECTION CRACKING L 43.00 Ft LU

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 23

Sample Number: 65

Sample Type: R Sample Comments:

Sample PCI: 90

Sample Area (SF): 4,500.00

47 JOINT REFLECTION CRACKING L 200.00 Ft LU

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 24

Branch - Section ID: R04OT - 003

PCI Family: IowaACRWSouthern

Branch Name: RUNWAY 04/22 Use: RUNWAY

LCD: 8/4/2009 Surface Type: AC

Rank: S

Section Area (sf): 49,829.00

Length (ft): 498.00 Width (ft): 100.00

From: . To: .

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022

PCI: 100 Total Samples: 10 Surveyed: 5

Inspection Comments:

Sample Comments:

Sample Comments:

Sample Comments:

Sample Number: 02

Sample Type: R

Sample PCI: 100

Sample Area (SF): 5,000.00

NO DISTRESS

Sample Number: 04

Sample Type: R

Sample PCI: 100

Sample Area (SF): 5,000.00

NO DISTRESS

Sample Number: 06

Sample Type: R

Sample PCI: 100 Sample Area (SF): 5,000.00

NO DISTRESS

Sample Number: 08

Sample Type: R Sample PCI: 100

Sample Area (SF): 5,000.00

NO DISTRESS

Sample Comments:

Sample Number: 09

Sample Type: R Sample PCI: 100

Sample Area (SF): 5,000.00

NO DISTRESS

Sample Comments:

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM		Page 2
	Branch - Section ID: R04OT - 004	
Branch Name: RUNWAY 04/22	Us	se: RUNWA
LCD: 6/3/2018 Surface Type: PCC Rank: S Section Area (sf): 40,000.00 Length (ft): 400.00 Width (ft): 100.00 From: . To: .	PCI Family: lowaPCCRWSE_Enhanced	
Slabs: 256 Slab Length (ft): 12.50 Slab Width (ft): 12.50 Joint Length (ft): 5,900.00	Section Comments:	
Last Insp Date: 11/14/2022 PCI: 97 Total Samples: 12 Surveyed: 6	Inspection Comments:	
Sample Number: 01		
Sample Type: R Sample PCI: 90 Sample Area (Slabs): 20.00 65 JOINT SEAL DAMAGE	Sample Comments: L 20.00 Slabs L 2.00 Slabs	
76 ASR Sample Number: 04	L 2.00 Slabs	
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00	Sample Comments:	
65 JOINT SEAL DAMAGE Sample Number: 05	L 20.00 Slabs	
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 24.00 65 JOINT SEAL DAMAGE	Sample Comments: L 24.00 Slabs	
Sample Number: 08		
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00	Sample Comments:	
65 JOINT SEAL DAMAGE Sample Number: 09	L 20.00 Slabs	
Sample Rumber: 09 Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00	Sample Comments:	

Sample Number: 12

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 24.00

65 JOINT SEAL DAMAGE

65 JOINT SEAL DAMAGE 24.00 Slabs L

L

20.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 26

Branch - Section ID: R13OT - 001

Branch Name: RUNWAY 13/31 Use: RUNWAY

PCI Family: IowaPCCRWSE Enhanced

Inspection Comments:

Sample Comments:

Sample Comments:

LCD: 6/3/2018 Surface Type: PCC

Rank: P

Section Area (sf): 601,045.00

Length (ft): 6,007.00 Width (ft): 100.00 From: 13 APPROACH To: 31 APPROACH

Slabs: 3.847 Section Comments:

Slab Length (ft): 12.50 Slab Width (ft): 12.50 Joint Length (ft): 90,056.69

Last Insp Date: 11/14/2022

PCI: 96

Total Samples: 194 Surveyed: 20

Sample Number: 003

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE 20.00 Slabs Т

Sample Number: 006

Sample Type: R

Sample PCI: 94

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs 74 JOINT SPALL Μ 1.00 Slabs

Sample Number: 023

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs

Sample Number: 026

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs

Sample Number: 043

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs

Sample Number: 046

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs

RE-INSPECTION REPORT

OTTUMWA REGIONAL AIRPORT Pavement Database: IA 2022 Generate Date: 6/14/2023 Network ID: OTM Page 27 Sample Number: 063 Sample Type: R Sample Comments: Sample PCI: 98 Sample Area (Slabs): 20.00 65 JOINT SEAL DAMAGE 20.00 Slabs Sample Number: 066 Sample Type: R Sample Comments: Sample PCI: 98 Sample Area (Slabs): 20.00 20.00 Slabs 65 JOINT SEAL DAMAGE L Sample Number: 083 Sample Type: R Sample Comments: Sample PCI: 98 Sample Area (Slabs): 20.00 65 JOINT SEAL DAMAGE 20.00 Slabs L Sample Number: 086 Sample Type: R Sample Comments: Sample PCI: 98 Sample Area (Slabs): 20.00 20.00 Slabs 65 JOINT SEAL DAMAGE L Sample Number: 103 Sample Type: R Sample Comments: Sample PCI: 98 Sample Area (Slabs): 20.00 65 JOINT SEAL DAMAGE L 20.00 Slabs Sample Number: 106 Sample Type: R Sample Comments: Sample PCI: 98 Sample Area (Slabs): 20.00 65 JOINT SEAL DAMAGE L 20.00 Slabs Sample Number: 123 Sample Comments: Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00 65 JOINT SEAL DAMAGE 20.00 Slabs Sample Number: 126 Sample Type: R Sample Comments: Sample PCI: 94

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs 73 SHRINKAGE CRACKING Ν 1.00 Slabs 74 JOINT SPALL L 2.00 Slabs

Sample Number: 143

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE 20.00 Slabs L

Pavement Database: IA 2022 Generate Date: 6/14/2023

Pavement Database: IA 2022			Generate Date: 6/14/2023
Network ID: OTM			Page 28
Sample Number: 146			
Sample Type: R Sample PCI: 89 Sample Area (Slabs): 20.00	S	Sample Comments:	
63 LINEAR CRACKING 65 JOINT SEAL DAMAGE 74 JOINT SPALL	L L L	1.00 Slabs 20.00 Slabs 3.00 Slabs	
Sample Number: 163			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00	S	Sample Comments:	
65 JOINT SEAL DAMAGE	L	20.00 Slabs	
Sample Number: 166			
Sample Type: R Sample PCI: 90 Sample Area (Slabs): 20.00	S	Sample Comments:	
63 LINEAR CRACKING 65 JOINT SEAL DAMAGE	L L	2.00 Slabs 20.00 Slabs	
Sample Number: 183			
Sample Type: R Sample PCI: 96 Sample Area (Slabs): 20.00	S	Sample Comments:	
65 JOINT SEAL DAMAGE	L	20.00 Slabs	
74 JOINT SPALL	L	1.00 Slabs	
Sample Number: 186			
Sample Type: R Sample PCI: 92 Sample Area (Slabs): 20.00	S	Sample Comments:	

L

1.00 Slabs

20.00 Slabs

1.00 Slabs

63 LINEAR CRACKING

74 JOINT SPALL

65 JOINT SEAL DAMAGE

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM			Page 29
Branch	- Sec	tion ID: TAOT - 001	
Branch Name: TAXIWAY A			Use: TAXIWAY
LCD: 6/1/2004 Surface Type: AC Rank: P Section Area (sf): 59,790.00 Length (ft): 1,680.00 Width (ft): 35.00 From: RUNWAY 13/31 To: TAXIWAY B		PCI Family: IowaACTWSouthern	
Slabs: Slab Length (ft): Slab Width (ft): Joint Length (ft):		Section Comments:	
Last Insp Date: 11/14/2022 PCI: 73 Total Samples: 13 Surveyed: 5		Inspection Comments:	
Sample Number: 01			
Sample Type: R Sample PCI: 75 Sample Area (SF): 5,600.00		Sample Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 RAVELING 57 WEATHERING	L M M L	180.00 Ft 35.00 Ft 1.00 SF 5,599.00 SF	LU W
Sample Number: 04			
Sample Type: R Sample PCI: 72 Sample Area (SF): 4,375.00		Sample Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 57 WEATHERING	L M L	30.00 Ft 155.00 Ft 4,375.00 SF	LU W
Sample Number: 06			
Sample Type: R Sample PCI: 76 Sample Area (SF): 4,375.00		Sample Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 57 WEATHERING	L M L	50.00 Ft 80.00 Ft 4,375.00 SF	LU 2NDY
Sample Number: 08			
Sample Type: R Sample PCI: 70 Sample Area (SF): 4,375.00		Sample Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	47.00 Ft	LU

М

Μ

L

105.00 Ft

4,374.00 SF

1.00 SF

2NDY

48 LONGITUDINAL/TRANSVERSE CRACKING

52 RAVELING

57 WEATHERING

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 30

Sample Number: 11

Sample Type: R Sample Comments:

Sample PCI: 70

Sample Area (SF): 4,460.00

48 LONGITUDINAL/TRANSVERSE CRACKING L 51.00 Ft LU 48 LONGITUDINAL/TRANSVERSE CRACKING M 160.00 Ft W, 2NDY

57 WEATHERING L 4,460.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 31

Branch - Section ID: TAOT - 002

PCI Family: IowaACTWSouthern

Use: TAXIWAY Branch Name: TAXIWAY A

LCD: 5/1/2004 Surface Type: AC

Rank: P

Section Area (sf): 6,507.00 Length (ft): 145.00 Width (ft): 35.00 From: RW13OT-01 To: TWBOT-02

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022 Inspection Comments:

PCI: 39 Total Samples: 1 Surveyed: 1

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 39

Sample Area (SF): 6,507.00

41 ALLIGATOR CRACKING	Н	9.00 SF	
41 ALLIGATOR CRACKING	M	42.00 SF	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	475.00 Ft L	.U
48 LONGITUDINAL/TRANSVERSE CRACKING	M	289.00 Ft F	S
50 PATCHING	Н	200.00 SF E	DGE
57 WEATHERING	L	6,307.00 SF	

Pavement Database: IA 2022 Generate Date: 6/14/2023

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Network ID: OTM Branch - Section ID: TAOT - 003 Branch Name: TAXIWAY A Use: TAXIWAY LCD: 8/4/2002 PCI Family: IowaACTWSouthern Surface Type: AC Rank: P Section Area (sf): 68,546.00 Length (ft): 1,977.00 Width (ft): 35.00 From: RW04OT-02 To: RW13OT-01 Slabs: Section Comments: Slab Length (ft): Slab Width (ft): Joint Length (ft): Last Insp Date: 11/14/2022 Inspection Comments: PCI: 57 Total Samples: 16 Surveyed: 5 Sample Number: 03 Sample Type: R Sample Comments: Sample PCI: 65 Sample Area (SF): 4,375.00 41 ALLIGATOR CRACKING L 22.00 SF edge 48 LONGITUDINAL/TRANSVERSE CRACKING L 181.00 Ft LU 48 LONGITUDINAL/TRANSVERSE CRACKING 133.00 Ft W, 2NDY Μ **57 WEATHERING** L 4.375.00 SF Sample Number: 05 Sample Type: R Sample Comments: Sample PCI: 53 Sample Area (SF): 4,375.00 41 ALLIGATOR CRACKING L 139.00 SF edge 48 LONGITUDINAL/TRANSVERSE CRACKING L LU 97.00 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING M 125.00 Ft 2NDY 57 WEATHERING L 4,375.00 SF Sample Number: 07 Sample Comments: Sample Type: R Sample PCI: 58 Sample Area (SF): 4,375.00 41 ALLIGATOR CRACKING L 89.00 SF edge 48 LONGITUDINAL/TRANSVERSE CRACKING L LU 79.00 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING Μ W 151.00 Ft **57 WEATHERING** L 4,375.00 SF Sample Number: 09 Sample Type: R Sample Comments: Sample PCI: 52 Sample Area (SF): 4,375.00

41 ALLIGATOR CRACKING 76.00 SF L edge 48 LONGITUDINAL/TRANSVERSE CRACKING L 167.00 Ft LU 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 171.00 Ft W, 2NDY, FS 53 RUTTING 100.00 SF L **57 WEATHERING** L 4.375.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 33

Sample Number: 11

Sample Type: R Sample Comments:

Sample PCI: 59

Sample Area (SF): 4,375.00

45 DEPRESSION L 40.00 SF

48 LONGITUDINAL/TRANSVERSE CRACKING L 250.00 Ft LU

48 LONGITUDINAL/TRANSVERSE CRACKING M 131.00 Ft W, 2NDY

53 RUTTING L 150.00 SF 57 WEATHERING L 4,375.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 34

Branch - Section ID: TAOT - 004

Branch Name: TAXIWAY A Use: TAXIWAY

LCD: 8/1/2009 PCI Family: lowaAACTWSE

Surface Type: AAC

Rank: P

Section Area (sf): 7,434.00

Length (ft): 140.00 Width (ft): 35.00

From: .

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022 Inspection Comments:

PCI: 54 Total Samples: 1 Surveyed: 1

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 54

Sample Area (SF): 7,434.00

41 ALLIGATOR CRACKING	L	6.00 SF	edge
48 LONGITUDINAL/TRANSVERSE CRACKING	Н	17.00 Ft	1 FT
48 LONGITUDINAL/TRANSVERSE CRACKING	L	50.00 Ft	LU
48 LONGITUDINAL/TRANSVERSE CRACKING	M	18.00 Ft	2NDY
52 RAVELING	L	7,434.00 SF	
57 WEATHERING	L	7,434.00 SF	

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 35

Branch - Section ID: TAOT - 005

Branch Name: TAXIWAY A Use: TAXIWAY

LCD: 8/1/2009

Surface Type: AAC

Rank: P

Section Area (sf): 8,374.00

Length (ft): 131.00 Width (ft): 35.00

From: . To: .

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022

PCI: 83 Total Samples: 2 Surveyed: 2 Inspection Comments:

LU

PCI Family: IowaAACTWSE

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 87

Sample Area (SF): 4,251.00

48 LONGITUDINAL/TRANSVERSE CRACKING L 28.00 Ft LU

56 SWELLING L 40.00 SF 57 WEATHERING L 4,251.00 SF

Sample Number: 02

Sample Type: R Sample Comments:

Sample PCI: 80

Sample Area (SF): 4,123.00

41 ALLIGATOR CRACKING L 2.00 SF 48 LONGITUDINAL/TRANSVERSE CRACKING L 19.00 Ft

50 PATCHING L 12.00 SF 57 WEATHERING L 4,061.00 SF

57 WEATHERING M 50.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM				Page 3
Brand	h - Sect	ion ID: TAOT - 006		
Branch Name: TAXIWAY A				Use: TAXIWA
LCD: 6/30/1970 Surface Type: APC Rank: P Section Area (sf): 83,942.00 Length (ft): 1,240.00 Width (ft): 50.00 From: SEE MAP To: SEE MAP		PCI Family: IowaAPCTWSouthern		
Slabs: Slab Length (ft): Slab Width (ft): Joint Length (ft):		Section Comments:		
Last Insp Date: 11/14/2022 PCI: 30 Total Samples: 15 Surveyed: 5		Inspection Comments:		
Sample Number: 06				
Sample Type: R Sample PCI: 26 Sample Area (SF): 5,000.00		Sample Comments:		
41 ALLIGATOR CRACKING 43 BLOCK CRACKING 47 JOINT REFLECTION CRACKING 56 SWELLING 57 WEATHERING	M L M M L	196.00 SF 4,804.00 SF 350.00 Ft 45.00 SF 5,000.00 SF	FS, 2NDY	
Sample Number: 07				
Sample Type: R Sample PCI: 31 Sample Area (SF): 5,000.00		Sample Comments:		
41 ALLIGATOR CRACKING 43 BLOCK CRACKING 47 JOINT REFLECTION CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 57 WEATHERING	M L M M L	118.00 SF 3,750.00 SF 300.00 Ft 110.00 Ft 5,000.00 SF	LU 10x6 FS W	
Sample Number: 09				
Sample Type: R Sample PCI: 30 Sample Area (SF): 5,000.00		Sample Comments:		
41 ALLIGATOR CRACKING 47 JOINT REFLECTION CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	M M L	72.00 SF 600.00 Ft 122.00 Ft	FS LU	

L

W, 2NDY

240.00 Ft

150.00 SF

5,000.00 SF

48 LONGITUDINAL/TRANSVERSE CRACKING

56 SWELLING

57 WEATHERING

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 37

Sample Number:	. 13
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Sample Type: R Sample Comments:

Sample PCI: 33

Sample Area (SF): 5,000.00

41 ALLIGATOR CRACKING M 66.00 SF
43 BLOCK CRACKING L 3,500.00 SF
47 JOINT REFLECTION CRACKING M 400.00 Ft FS
48 LONGITUDINAL/TRANSVERSE CRACKING M 126.00 Ft

57 WEATHERING L 5,000.00 SF

Sample Number: 14

Sample Type: R Sample Comments:

Sample PCI: 30

Sample Area (SF): 5,000.00

41 ALLIGATOR CRACKING Μ 130.00 SF edge 43 BLOCK CRACKING 1,250.00 SF LU 6x8 L 47 JOINT REFLECTION CRACKING 375.00 Ft FS Μ 48 LONGITUDINAL/TRANSVERSE CRACKING 160.00 Ft LU L 48 LONGITUDINAL/TRANSVERSE CRACKING 245.00 Ft W, 2NDY Μ

57 WEATHERING L 5,000.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 38

Branch - Section ID: TAOT - 007

Branch Name: TAXIWAY A Use: TAXIWAY

LCD: 6/3/2018

Surface Type: PCC

Rank: P

Section Area (sf): 28,447.00

Length (ft): 640.00 Width (ft): 35.00

From: . To:

Slabs: 328 Section Comments:

Slab Length (ft): 10.00 Slab Width (ft): 8.80 Joint Length (ft): 5,300.93

Last Insp Date: 11/14/2022

PCI: 98

Total Samples: 18 Surveyed: 7

Sample Number: 04

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE Т

Sample Number: 06

Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE

Sample Number: 08

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE

Sample Number: 10 Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 25.00

65 JOINT SEAL DAMAGE

Sample Number: 13

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE

Sample Number: 14

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE

PCI Family: IowaPCCTWSE Enhanced

Inspection Comments:

Sample Comments:

20.00 Slabs

Sample Comments:

20.00 Slabs

Sample Comments:

20.00 Slabs

20.00 Slabs

Sample Comments:

L

L

L

25.00 Slabs

Sample Comments:

Sample Comments:

20.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 39

Sample Number: 16

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 15.00

65 JOINT SEAL DAMAGE L 15.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 40

PCI Family: IowaPCCTWSE Enhanced

Sample Comments:

Sample Comments:

Sample Comments:

Branch - Section ID: TAOT - 008

Branch Name: TAXIWAY A Use: TAXIWAY

LCD: 6/3/2018 Surface Type: PCC

Rank: P

Section Area (sf): 42,805.00 Length (ft): 1,040.00

Width (ft): 35.00

From: . To:

Slabs: 480

Slab Length (ft): 10.00 Slab Width (ft): 8.80 Joint Length (ft): 7,775.24

Last Insp Date: 11/14/2022

PCI: 97 Total Samples: 24 Surveyed: 7

Section Comments:

Inspection Comments:

Sample Number: 02

Sample Type: R

Sample PCI: 94

Sample Area (Slabs): 19.00

65 JOINT SEAL DAMAGE L 19.00 Slabs 1.00 Slabs 73 SHRINKAGE CRACKING Ν 74 JOINT SPALL ı 2.00 Slabs

Sample Number: 04

Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs

Sample Number: 07

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 22.00

65 JOINT SEAL DAMAGE L 22.00 Slabs

Sample Number: 12

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE 20.00 Slabs

Sample Number: 15

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 25.00

65 JOINT SEAL DAMAGE L 25.00 Slabs

Sample Number: 18

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE 20.00 Slabs L

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 41

Sample Number: 21

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JOINT SEAL DAMAGE L 20.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Page 42

Network ID: OTM Branch - Section ID: TBOT - 001 Branch Name: TAXIWAY B Use: TAXIWAY LCD: 6/1/2006 PCI Family: IowaAPCTWSouthern Surface Type: APC Rank: P Section Area (sf): 23,338.00 Length (ft): 300.00 Width (ft): 80.00 From: RUNWAY INTERSECTIONS To: HANGAR AREA Slabs: Section Comments: Slab Length (ft): Slab Width (ft): Joint Length (ft): Last Insp Date: 11/14/2022 Inspection Comments: PCI: 26 Total Samples: 6 Surveyed: 4 Sample Number: 02 Sample Type: R Sample Comments: Sample PCI: 26 Sample Area (SF): 4,060.00 41 ALLIGATOR CRACKING M 130.00 SF 43 BLOCK CRACKING Μ 500.00 SF 47 JOINT REFLECTION CRACKING Μ 250.00 Ft W, 2NDY, FS 48 LONGITUDINAL/TRANSVERSE CRACKING L 320.00 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING W, 2NDY, FS M 250.00 Ft 57 WEATHERING L 4,060.00 SF Sample Number: 03 Sample Comments: Sample Type: R Sample PCI: 28 Sample Area (SF): 4,000.00 41 ALLIGATOR CRACKING M 30.00 SF 43 BLOCK CRACKING L 250.00 SF 43 BLOCK CRACKING Μ 250.00 SF 47 JOINT REFLECTION CRACKING M 250.00 Ft W, 2NDY, FS 48 LONGITUDINAL/TRANSVERSE CRACKING **SPALLING** Н 58.00 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING L 230.00 Ft LU 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 210.00 Ft W, 2NDY 57 WEATHERING L 4,000.00 SF Sample Number: 04 Sample Type: R Sample Comments: Sample PCI: 24 Sample Area (SF): 4,000.00 41 ALLIGATOR CRACKING 100.00 SF Μ 43 BLOCK CRACKING 1,250.00 SF L 43 BLOCK CRACKING Μ 1.250.00 SF 47 JOINT REFLECTION CRACKING Μ 250.00 Ft W, 2NDY, FS

Μ

L

200.00 Ft

4,000.00 SF

W

48 LONGITUDINAL/TRANSVERSE CRACKING

57 WEATHERING

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 43

Sample Number: 05

Sample Type: R Sample Comments:

Sample PCI: 26

Sample Area (SF): 4,000.00

41 ALLIGATOR CRACKING	М	80.00 SF	
43 BLOCK CRACKING	L	1,000.00 SF	LU, TYP. 7x7
43 BLOCK CRACKING	M	500.00 SF	W, 2NDY, TYP. 7x7
47 JOINT REFLECTION CRACKING	M	250.00 Ft	W, 2NDY, FS
48 LONGITUDINAL/TRANSVERSE CRACKING	L	170.00 Ft	LU
48 LONGITUDINAL/TRANSVERSE CRACKING	M	215.00 Ft	W
57 WEATHERING	L	4,000.00 SF	

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 44

Branch - Section ID: TBOT - 002

PCI Family: IowaACTWSouthern

Branch Name: TAXIWAY B Use: TAXIWAY

LCD: 6/1/2004

Surface Type: AC

Rank: P

Section Area (sf): 7,529.00

Length (ft): 125.00 Width (ft): 50.00 From: TWBOT-01 To: RW13OT-01

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022 Inspection Comments:

PCI: 61 Total Samples: 2 Surveyed: 2

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 62

Sample Area (SF): 3,240.00

48 LONGITUDINAL/TRANSVERSE CRACKING L 43.00 Ft LU 48 LONGITUDINAL/TRANSVERSE CRACKING M 146.00 Ft W, FS

57 WEATHERING L 2,640.00 SF 57 WEATHERING M 600.00 SF

Sample Number: 02

Sample Type: R Sample Comments:

Sample PCI: 59

Sample Area (SF): 4,289.00

48 LONGITUDINAL/TRANSVERSE CRACKING L 92.00 Ft LU
48 LONGITUDINAL/TRANSVERSE CRACKING L 40.00 Ft LS
48 LONGITUDINAL/TRANSVERSE CRACKING M 121.00 Ft W, FS
56 SWELLING L 110.00 SF

 56 SWELLING
 L
 110.00 SF

 56 SWELLING
 M
 135.00 SF

 57 WEATHERING
 L
 4,289.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 45

Branch - Section ID: TBOT - 003

Branch Name: TAXIWAY B Use: TAXIWAY

LCD: 8/4/2009 Surface Type: AC

Rank: P

Section Area (sf): 27,004.00

Length (ft): 700.00 Width (ft): 35.00

From: . To: .

Section Comments: Slabs:

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

Last Insp Date: 11/14/2022

PCI: 100 Total Samples: 6 Surveyed: 4

Inspection Comments:

Sample Comments:

Sample Comments:

L

PCI Family: IowaACTWSouthern

Sample Number: 02

Sample Type: R

Sample PCI: 100

Sample Area (SF): 4,375.00

NO DISTRESS

Sample Number: 04

Sample Type: R

Sample PCI: 99

Sample Area (SF): 5,000.00

56 SWELLING

Sample Number: 05

Sample Type: R

Sample PCI: 100

Sample Area (SF): 4,000.00

NO DISTRESS

Sample Number: 06

Sample Type: R Sample PCI: 100

Sample Area (SF): 3,300.00

NO DISTRESS

Sample Comments:

1.00 SF

Sample Comments:

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 46

Branch - Section ID: TBOT - 004

PCI Family: IowaACTWSouthern

Inspection Comments:

Sample Comments:

Branch Name: TAXIWAY B Use: TAXIWAY

Surface Type: AC

LCD: 8/4/2009

Rank: P

Section Area (sf): 88,287.00 Length (ft): 2,400.00 Width (ft): 35.00

From: . To: .

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022

PCI: 99

Total Samples: 19 Surveyed: 5

Sample Number: 02

Sample Type: R Sample PCI: 100

Sample Area (SF): 4,375.00

NO DISTRESS

Sample Number: 05

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (SF): 4,375.00

> 48 LONGITUDINAL/TRANSVERSE CRACKING L 5.00 Ft LU

Sample Number: 11

Sample Type: R Sample Comments:

Sample PCI: 100

Sample Area (SF): 4,375.00

NO DISTRESS

Sample Number: 14

Sample Comments: Sample Type: R

Sample PCI: 100

Sample Area (SF): 4,375.00

NO DISTRESS

Sample Number: 18

Sample Type: R Sample Comments:

Sample PCI: 96

Sample Area (SF): 4,375.00

> 48 LONGITUDINAL/TRANSVERSE CRACKING L 12.00 Ft LU

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 47

Branch - Section ID: TBOT - 005

Branch Name: TAXIWAY B Use: TAXIWAY

LCD: 8/4/2009

Surface Type: AC

Rank: P

Section Area (sf): 16,466.00

Length (ft): 332.00 Width (ft): 35.00

From: . To: .

Slabs: Section Comments:

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

Last Insp Date: 11/14/2022

PCI: 100 Total Samples: 3 Surveyed: 3 Inspection Comments:

PCI Family: IowaACTWSouthern

Sample Number: 01

Sample Type: R

Sample PCI: 100

Sample Area (SF): 5,345.00

NO DISTRESS

Sample Number: 02

Sample Type: R

Sample PCI: 100

Sample Area (SF): 4,375.00

NO DISTRESS

Sample Number: 03

Sample Type: R Sample PCI: 100

Sample Area (SF): 6,746.00

NO DISTRESS

Sample Comments:

Sample Comments:

Sample Comments:

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM					Page 48
	- Sec	tion ID: TBOT - 006			
Branch Name: TAXIWAY B				Use:	TAXIWAY
LCD: 6/1/2015 Surface Type: APC Rank: P Section Area (sf): 24,230.00 Length (ft): 540.00 Width (ft): 35.00 From: RUNWAY INTERSECTIONS To: HANGAR AREA		PCI Family: IowaAPCTWSouthern			
Slabs: Slab Length (ft): Slab Width (ft): Joint Length (ft):		Section Comments:			
Last Insp Date: 11/14/2022 PCI: 64 Total Samples: 4 Surveyed: 4		Inspection Comments:			
Sample Number: 01					
Sample Type: R Sample PCI: 59 Sample Area (SF): 6,090.00		Sample Comments:			
41 ALLIGATOR CRACKING 45 DEPRESSION 48 LONGITUDINAL/TRANSVERSE CRACKING 50 PATCHING 57 WEATHERING	M L L L	10.00 SF 90.00 SF 521.00 Ft 540.00 SF 5,550.00 SF	edge LU		
Sample Number: 02					
Sample Type: R Sample PCI: 58 Sample Area (SF): 6,090.00		Sample Comments:			
45 DEPRESSION 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 57 WEATHERING	L L M L	300.00 SF 828.00 Ft 50.00 Ft 6,090.00 SF	LU FS		
Sample Number: 03					
Sample Type: R Sample PCI: 64 Sample Area (SF): 6,090.00		Sample Comments:			
45 DEPRESSION 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 57 WEATHERING	L L M L	350.00 SF 520.00 Ft 75.00 Ft 6,090.00 SF	LU W, FS		
Sample Number: 04					
Sample Type: R Sample PCI: 78		Sample Comments:			

Sample Area (SF): 5,960.00

> 45 DEPRESSION 63.00 SF 48 LONGITUDINAL/TRANSVERSE CRACKING 229.00 Ft LU 57 WEATHERING 5,960.00 SF

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM			Page 49
	Branch - Section	on ID: TBOT - 007	
Branch Name: TAXIWAY B			Use: TAXIWAY
LCD: 6/3/2018 Surface Type: PCC Rank: P Section Area (sf): 25,868.00 Length (ft): 400.00 Width (ft): 65.00 From: . To: .	Р	CI Family: IowaPCCTWSE_Enhanced	
Slabs: 166 Slab Length (ft): 12.50 Slab Width (ft): 12.50 Joint Length (ft): 3,676.24	S	Section Comments:	
Last Insp Date: 11/14/2022 PCI: 96 Total Samples: 12 Surveyed: 6	Ir	nspection Comments:	
Sample Number: 02			
Sample Type: R Sample PCI: 95 Sample Area (Slabs): 24.00 65 JOINT SEAL DAMAGE		Sample Comments:	
75 CORNER SPALL	L M	24.00 Slabs 1.00 Slabs	
Sample Number: 03			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 24.00		sample Comments:	
65 JOINT SEAL DAMAGE Sample Number: 04	L	24.00 Slabs	
Sample Number: 04 Sample Type: R Sample PCI: 94 Sample Area (Slabs): 30.00 65 JOINT SEAL DAMAGE		Sample Comments: 30.00 Slabs	
74 JOINT SEAL DAMAGE 74 JOINT SPALL 75 CORNER SPALL	L M L	1.00 Slabs 1.00 Slabs	
Sample Number: 06			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 19.00	S	sample Comments:	
65 JOINT SEAL DAMAGE	L	19.00 Slabs	
Sample Number: 10 Sample Type: R	c	sample Comments:	
Sample Type. IN	3	ampie comments.	

Sample PCI: 93

Sample Area (Slabs): 26.00

65 JOINT SEAL DAMAGE 26.00 Slabs 73 SHRINKAGE CRACKING Ν 2.00 Slabs 75 CORNER SPALL 2.00 Slabs

Pavement Database: IA 2022 Generate Date: 6/14/2023

Network ID: OTM Page 50

Sample Number: 11

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 24.00

65 JOINT SEAL DAMAGE L 24.00 Slabs

APPENDIX D WORK HISTORY REPORT

Pavement Database: IA 2022 Generate Date: 6/25/2023

Network ID: OTM Page 1

Network: OTTUMWA REGIONAL AIRPORT

Branch - Section ID: A01OT - 001

 LCD: 6/1/2007
 Length (ft):
 230.00

 Use: APRON
 Width (ft):
 100.00

 Rank: P
 True Area (sf):
 20,450.00

Surface: AAC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2018	PA-AD	Patching - AC Deep	\$0.00	0.00	False	EST
06-01-2010	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	-
06-01-2007	OL-AS	Overlay - AC Structural	\$0.00	0.00	True	-
06-01-1970	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Branch - Section ID: A01OT - 002

 LCD: 6/30/1970
 Length (ft):
 400.00

 Use: APRON
 Width (ft):
 87.00

 Rank: P
 True Area (sf):
 35,525.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2010	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	-
06-30-1970	OL-AS	Overlay - AC Structural	\$0.00	0.00	True	-
06-01-1950	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Branch - Section ID: A01OT - 003

 LCD: 4/3/2021
 Length (ft):
 338.00

 Use: APRON
 Width (ft):
 114.00

 Rank: P
 True Area (sf):
 38,700.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
04-03-2021	CR-PC	Complete Reconstruction - PCC	\$387,000.00	7.00	True	7" PCC SURFACE
04-02-2021	SB-AG	Subbase - Aggregate	\$0.00	5.00	False	5" SUBBASE - ASPHALT MILLINGS
04-01-2021	SG-CO	Subgrade - Compacted	\$0.00	12.00	False	12" SUBGRADE PREPARATION
06-01-1970	OL-AC	Overlay - AC	\$0.00	3.00	True	3" AC Overlay
06-01-1943	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Branch - Section ID: A01OT - 004

 LCD: 6/1/2007
 Length (ft):
 365.00

 Use: APRON
 Width (ft):
 25.00

 Rank: P
 True Area (sf):
 12,713.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2007	OL-AS	Overlay - AC Structural	\$0.00	0.00	True	-
01-01-1970	NC-PC	New Construction - PCC	\$0.00	0.00	True	ESTIMATED CONSTRUCTION DATE

Pavement Database: IA 2022 Generate Date: 6/25/2023

Network ID: OTM Page 2

Branch - Section ID: A01OT - 005

 LCD: 1/1/1970
 Length (ft):
 250.00

 Use: APRON
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 9,713.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-1970	OL-AC	Overlay - AC	\$0.00	0.00	True	EST
06-01-1950	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Branch - Section ID: A01OT - 006

 LCD: 8/3/2018
 Length (ft):
 445.00

 Use: APRON
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 36,044.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
08-03-2018	CR-PC	Complete Reconstruction - PCC	\$0.00	7.00	True	7" P-501
08-02-2018	SB-AG	Subbase - Aggregate	\$0.00	5.00	False	5" Modified Subbase
08-01-2018	SG-CO	Subgrade - Compacted	\$0.00	12.00	False	12" Subgrade Preparation
06-01-1970	OL-AC	Overlay - AC	\$0.00	3.00	True	3" AC Overlay
06-01-1943	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Branch - Section ID: A01OT - 007

 LCD: 8/3/2019
 Length (ft):
 343.00

 Use: APRON
 Width (ft):
 100.00

 Rank: P
 True Area (sf):
 34,176.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
08-03-2019	CR-PC	Complete Reconstruction - PCC	\$0.00	7.00	True	7" P-501
08-02-2019	SB-AG	Subbase - Aggregate	\$0.00	5.00	False	5" Modified Subbase
08-01-2019	SG-CO	Subgrade - Compacted	\$0.00	12.00	False	12" Subgrade Preparation
06-01-1970	OL-AC	Overlay - AC	\$0.00	3.00	True	3" AC Overlay
06-01-1943	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Branch - Section ID: A01OT - 008

 LCD: 8/3/2016
 Length (ft):
 280.00

 Use: APRON
 Width (ft):
 100.00

 Rank: P
 True Area (sf):
 25,031.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
08-03-2016	CR-PC	Complete Reconstruction - PCC	\$0.00	7.00	True	7" P-501
08-02-2016	SB-AG	Subbase - Aggregate	\$0.00	5.00	False	5" Modified Subbase
08-01-2016	SG-CO	Subgrade - Compacted	\$0.00	12.00	False	12" Subgrade preparation
06-01-1970	OL-AC	Overlay - AC	\$0.00	3.00	True	3" AC Overlay
06-01-1943	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Pavement Database: IA 2022 Generate Date: 6/25/2023

Network ID: OTM Page 3

Branch - Section ID: A01OT - 009

 LCD: 4/3/2022
 Length (ft):
 338.00

 Use: APRON
 Width (ft):
 36.00

 Rank: P
 True Area (sf):
 12,163.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
04-03-2022	CR-PC	Complete Reconstruction - PCC	\$121,630.00	7.00	True	7" PCC SURFACE
04-02-2022	SB-AG	Subbase - Aggregate	\$0.00	5.00	False	5" SUBBASE - ASPHALT MILLINGS
04-01-2022	SG-CO	Subgrade - Compacted	\$0.00	12.00	False	12" SUBGRADE PREPARATION
06-01-1970	OL-AC	Overlay - AC	\$0.00	3.00	True	3" AC Overlay
06-01-1943	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Branch - Section ID: A02OT - 001

 LCD: 6/30/1970
 Length (ft):
 700.00

 Use: APRON
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 71,191.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-30-1970	OL-AS	Overlay - AC Structural	\$0.00	3.00	True	3" AC Overlay
06-01-1943	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Branch - Section ID: A02OT - 002

 LCD: 8/11/2001
 Length (ft):
 640.00

 Use: APRON
 Width (ft):
 140.00

 Rank: P
 True Area (sf):
 79,574.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2015	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	-
06-01-2010	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	-
08-11-2001	NC-AC	New Construction - AC	\$0.00	2.00	True	2" P-401 AC
08-10-2001	BA-BI	Base Course - Bituminous	\$0.00	4.00	False	4" P-401 Bit. Base
08-09-2001	BA-AG	Base Course - Aggregate	\$0.00	9.00	False	9" P-209 Agg Base

Branch - Section ID: A02OT - 003

 LCD: 2/11/1970
 Length (ft):
 160.00

 Use: APRON
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 5,600.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
02-11-1970	OL-AC	Overlay - AC	\$0.00	0.00	True	-
01-01-1960	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Pavement Database: IA 2022 Generate Date: 6/25/2023

Network ID: OTM Page 4

Branch - Section ID: A02OT - 004

 LCD: 2/11/2012
 Length (ft):
 90.00

 Use: APRON
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 3,150.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
02-11-2012	OL-AC	Overlay - AC	\$0.00	0.00	True	EST
01-01-1960	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Branch - Section ID: R04OT - 001

 LCD: 8/1/2009
 Length (ft):
 554.00

 Use: RUNWAY
 Width (ft):
 100.00

 Rank: S
 True Area (sf):
 37,912.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	ST-SS	Surface Treatment - Slurry Seal	\$0.00	0.00	False	P-626 SLURRY SEAL
06-01-2021	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	CRACK SEAL (PRE-SLURRY SEAL)
06-01-2021	PA-AD	Patching - AC Deep	\$0.00	0.00	False	FULL DEPTH PATCH (PRE-SLURRY SEAL)
08-01-2009	OL-AS	Overlay - AC Structural	\$0.00	3.00	True	3" AC
06-30-1986	OL-AS	Overlay - AC Structural	\$0.00	2.50	True	2.5" AC
06-01-1960	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Branch - Section ID: R04OT - 002

 LCD: 8/1/2009
 Length (ft):
 3,223.00

 Use: RUNWAY
 Width (ft):
 100.00

 Rank: S
 True Area (sf):
 322,356.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	ST-SS	Surface Treatment - Slurry Seal	\$0.00	0.00	False	P-626 SLURRY SEAL
06-01-2021	PA-AD	Patching - AC Deep	\$0.00	0.00	False	FULL DEPTH PATCH (PRE-SLURRY SEAL)
06-01-2021	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	CRACK SEAL (PRE-SLURRY SEAL)
08-01-2009	OL-AS	Overlay - AC Structural	\$0.00	3.00	True	3" AC
06-30-1970	OL-AS	Overlay - AC Structural	\$0.00	2.50	True	2.5" AC
06-01-1960	NC-PC	New Construction - PCC	\$0.00	9.00	True	9" PCC

Branch - Section ID: R04OT - 003

 LCD: 8/4/2009
 Length (ft):
 498.00

 Use: RUNWAY
 Width (ft):
 100.00

 Rank: S
 True Area (sf):
 49,829.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	ST-SS	Surface Treatment - Slurry Seal	\$0.00	0.00	False	P-626 SLURRY SEAL
06-01-2021	PA-AD	Patching - AC Deep	\$0.00	0.00	False	FULL DEPTH PATCH (PRE-SLURRY SEAL)
06-01-2021	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	CRACK SEAL (PRE-SLURRY SEAL)
08-04-2009	NC-AC	New Construction - AC	\$0.00	4.00	True	4" P-401
08-03-2009	BA-AG	Base Course - Aggregate	\$0.00	12.00	False	12" P-209
08-02-2009	SB-AG	Subbase - Aggregate	\$0.00	4.00	False	RECLAIMED MATERIAL
08-01-2009	SG-CO	Subgrade - Compacted	\$0.00	9.00	False	-

Pavement Database: IA 2022 Generate Date: 6/25/2023

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Branch - Section ID: R04OT - 004

 LCD: 6/3/2018
 Length (ft):
 400.00

 Use: RUNWAY
 Width (ft):
 100.00

 Rank: S
 True Area (sf):
 40,000.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2018	CR-PC	Complete Reconstruction - PCC	\$0.00	6.00	True	6" P-501
06-02-2018	BA-AG	Base Course - Aggregate	\$0.00	4.00	False	4" P-209
06-01-2018	SG-ST	Subgrade - Stabilized	\$0.00	12.00	False	12" P-158 Fly Ash Treated Subgrade
08-01-2009	OL-AS	Overlay - AC Structural	\$0.00	3.00	True	3" AC
06-30-1986	OL-AS	Overlay - AC Structural	\$0.00	2.50	True	2.5" AC
06-01-1960	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

Branch - Section ID: R13OT - 001

 LCD: 6/3/2018
 Length (ft):
 6,007.00

 Use: RUNWAY
 Width (ft):
 100.00

 Rank: P
 True Area (sf):
 601,045.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2018	CR-PC	Complete Reconstruction - PCC	\$0.00	8.50	True	8.5" P-501
06-02-2018	BA-AG	Base Course - Aggregate	\$0.00	8.00	False	8" P-209
06-01-2018	SG-ST	Subgrade - Stabilized	\$0.00	12.00	False	12" P-158 Fly Ash Treated Subgrade
06-01-2011	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	-
06-01-2011	PA-AD	Patching - AC Deep	\$0.00	0.00	False	-
04-04-1993	OL-AC	Overlay - AC	\$0.00	0.00	True	EST
06-01-1964	NC-AC	New Construction - AC	\$0.00	3.00	True	-

Branch - Section ID: TAOT - 001

 LCD: 6/1/2004
 Length (ft):
 1,680.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 59,790.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2010	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	-
06-01-2004	CR-AC	Complete Reconstruction - AC	\$0.00	0.00	True	-
06-30-1970	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Branch - Section ID: TAOT - 002

 LCD: 5/1/2004
 Length (ft):
 145.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 6,507.00

 Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
05-01-2004	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Pavement Database: IA 2022 Generate Date: 6/25/2023

Network ID: OTM Page 6

Branch - Section ID: TAOT - 003

 LCD: 8/4/2002
 Length (ft):
 1,977.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 68,546.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
08-04-2002	NC-AC	New Construction - AC	\$0.00	2.00	True	2" P-401 AC
08-03-2002	BA-BI	Base Course - Bituminous	\$0.00	4.00	False	4" P-401 Asphalt Base
08-02-2002	BA-AG	Base Course - Aggregate	\$0.00	9.00	False	9" P-209 Agg Base
08-01-2002	SG-CO	Subgrade - Compacted	\$0.00	0.00	False	P-152 Compacted SG

Branch - Section ID: TAOT - 004

 LCD: 8/1/2009
 Length (ft):
 140.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 7,434.00

Surface: AAC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
08-01-2009	OL-AS	Overlay - AC Structural	\$0.00	3.00	True	-
05-01-2004	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Branch - Section ID: TAOT - 005

 LCD: 8/1/2009
 Length (ft):
 131.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 8,374.00

Surface: AAC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
08-01-2009	OL-AS	Overlay - AC Structural	\$0.00	3.00	True	-
05-01-2004	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Branch - Section ID: TAOT - 006

 LCD: 6/30/1970
 Length (ft):
 1,240.00

 Use: TAXIWAY
 Width (ft):
 50.00

 Rank: P
 True Area (sf):
 83,942.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2010	CS-AC	Crack Sealing - AC	\$0.00	0.00	False	-
06-30-1970	OL-AS	Overlay - AC Structural	\$0.00	0.00	True	-
06-01-1960	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Pavement Database: IA 2022 Generate Date: 6/25/2023

Network ID: OTM Page 7

Branch - Section ID: TAOT - 007

 LCD: 6/3/2018
 Length (ft):
 640.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 28,447.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2018	CR-PC	Complete Reconstruction - PCC	\$0.00	8.50	True	8.5" P-501
06-02-2018	BA-AG	Base Course - Aggregate	\$0.00	8.00	False	8" P-209
06-01-2018	SG-ST	Subgrade - Stabilized	\$0.00	12.00	False	12" P-158 Fly Ash Treated Subgrade
08-04-2002	NC-AC	New Construction - AC	\$0.00	2.00	True	2" P-401 AC
08-03-2002	BA-BI	Base Course - Bituminous	\$0.00	4.00	False	4" P-401 Asphalt Base
08-02-2002	BA-AG	Base Course - Aggregate	\$0.00	9.00	False	9" P-209 Agg Base
08-01-2002	SG-CO	Subgrade - Compacted	\$0.00	0.00	False	P-152 Compacted SG

Branch - Section ID: TAOT - 008

 LCD: 6/3/2018
 Length (ft):
 1,040.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 42,805.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2018	CR-PC	Complete Reconstruction - PCC	\$0.00	8.50	True	8.5" P-501
06-02-2018	BA-AG	Base Course - Aggregate	\$0.00	8.00	False	8" P-209
06-01-2018	SG-ST	Subgrade - Stabilized	\$0.00	12.00	False	12" P-158 Fly Ash Treated Subgrade
06-01-2004	CR-AC	Complete Reconstruction - AC	\$0.00	0.00	True	-
06-30-1970	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Branch - Section ID: TBOT - 001

 LCD: 6/1/2006
 Length (ft):
 300.00

 Use: TAXIWAY
 Width (ft):
 80.00

 Rank: P
 True Area (sf):
 23,338.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2006	OL-AS	Overlay - AC Structural	\$0.00	0.00	True	-
06-30-1970	OL-AS	Overlay - AC Structural	\$0.00	0.00	True	-
06-01-1960	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Branch - Section ID: TBOT - 002

 LCD: 6/1/2004
 Length (ft):
 125.00

 Use: TAXIWAY
 Width (ft):
 50.00

 Rank: P
 True Area (sf):
 7,529.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2004	NC-AC	New Construction - AC	\$0.00	0.00	True	-

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Branch - Section ID: TBOT - 003

 LCD: 8/4/2009
 Length (ft):
 700.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 27,004.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	ST-SS	Surface Treatment - Slurry Seal	\$0.00	0.00	False	P-626 SLURRY SEAL
08-04-2009	NC-AC	New Construction - AC	\$0.00	4.00	True	4" P-401 AC
08-03-2009	BA-AG	Base Course - Aggregate	\$0.00	12.00	False	12" P-209
08-02-2009	BA-AG	Base Course - Aggregate	\$0.00	4.00	False	RECLAIMED AC
08-01-2009	SB-AG	Subbase - Aggregate	\$0.00	9.00	False	-

Branch - Section ID: TBOT - 004

 LCD: 8/4/2009
 Length (ft):
 2,400.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 88,287.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	ST-SS	Surface Treatment - Slurry Seal	\$0.00	0.00	False	P-626 SLURRY SEAL
08-04-2009	NC-AC	New Construction - AC	\$0.00	4.00	True	-
08-03-2009	BA-AG	Base Course - Aggregate	\$0.00	12.00	False	-
08-02-2009	BA-AG	Base Course - Aggregate	\$0.00	4.00	False	RECLAIMED AC
08-01-2009	SB-AG	Subbase - Aggregate	\$0.00	9.00	False	-

Branch - Section ID: TBOT - 005

 LCD: 8/4/2009
 Length (ft):
 332.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 16,466.00

Surface: AC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-02-2021	ST-SS	Surface Treatment - Slurry Seal	\$0.00	0.00	False	P-626 SLURRY SEAL
08-04-2009	NC-AC	New Construction - AC	\$0.00	4.00	True	-
08-03-2009	BA-AG	Base Course - Aggregate	\$0.00	12.00	False	-
08-02-2009	BA-AG	Base Course - Aggregate	\$0.00	4.00	False	RECLAIMED AC
08-01-2009	SB-AG	Subbase - Aggregate	\$0.00	9.00	False	-

Branch - Section ID: TBOT - 006

 LCD: 6/1/2015
 Length (ft):
 540.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 24,230.00

Surface: APC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2021	PA-AD	Patching - AC Deep	\$0.00	0.00	False	ESTIMATE
06-01-2015	OL-AC	Overlay - AC	\$101,515.00	2.50	True	2.5"-3" MILL/2.5"-3" OVERLAY
06-01-1970	OL-AC	Overlay - AC	\$0.00	3.00	True	3" AC OV
07-13-1943	NC-PC	New Construction - PCC	\$0.00	8.00	True	8" PCC

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Network ID: OTM Page 9

Branch - Section ID: TBOT - 007

 LCD: 6/3/2018
 Length (ft):
 400.00

 Use: TAXIWAY
 Width (ft):
 65.00

 Rank: P
 True Area (sf):
 25,868.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2018	CR-PC	Complete Reconstruction - PCC	\$0.00	6.00	True	6" P-501
06-02-2018	BA-AG	Base Course - Aggregate	\$0.00	4.00	False	4" P-209
06-01-2018	SG-ST	Subgrade - Stabilized	\$0.00	12.00	False	12" P-158 Fly Ash Treated Subgrade
06-01-2004	NC-AC	New Construction - AC	\$0.00	0.00	True	-

APPENDIX E

LOCALIZED PREVENTIVE MAINTENANCE POLICIES AND UNIT COST TABLES

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

Distussa Tymo	Severity	Maintananaa Aatian		
Distress Type	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 Durability Cracking	Medium	Full Depth Patch		
Durability Cracking 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. 2023 unit costs for localized preventive maintenance actions.

Maintenance Action	Unit Cost		
Asphalt Patch—Asphalt-Surfaced Pavement	\$15.24/sf		
Crack Sealing—Asphalt-Surfaced Pavement	\$2.61/lf		
Partial Depth PCC Patch—PCC Pavement	\$39.04/sf		
Full Depth PCC Patch—PCC Pavement	\$17.43/sf		
Crack Sealing—PCC Pavement	\$3.14/lf		
Joint Sealing—PCC Pavement	\$3.14/lf		
Grinding—PCC Pavement	\$0.37/sf		
Slab Replacement—PCC Pavement	\$17.43/sf		

Table Note: The unit cost estimates are based on broad statewide numbers and should be adjusted to reflect local costs.

Table E-4. 2023 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	\$10.82	\$5.12	\$5.12	\$5.12	\$0.00	\$0.00	\$0.00
PCC	\$18.08	\$8.55	\$8.55	\$8.55	\$0.00	\$0.00	\$0.00

Table Note: The unit cost estimates are based on broad statewide numbers and should be adjusted to reflect local costs.

APPENDIX F YEAR 2023 LOCALIZED PREVENTIVE MAINTENANCE DETAILS

Table F-1. Year 2023 localized preventive maintenance details.

Branch	Section	Distress Type	Severity	Distress Quantity	Distress Unit	Maintenance Action	Unit Cost	2023 Estimated Cost
A01OT	03	Joint Spalling	Medium	3	Slabs	Slabs Patching - PCC Partial Depth		\$697
A01OT	06	Blow-up	Low	3	Slabs	Slab Replacement - PCC	\$17.43	\$5,653
A01OT	06	Corner Spalling	Medium	3	Slabs	Patching - PCC Partial Depth	\$39.04	\$273
A01OT	06	Joint Seal Damage	Medium	47	Slabs	Joint Seal (Localized)	\$3.14	\$3,018
A01OT	07	Joint Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	\$39.04	\$553
A01OT	08	Corner Break	Low	7	Slabs	Crack Sealing - PCC	\$3.14	\$167
A01OT	08	Corner Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	\$39.04	\$105
A01OT	08	Joint Seal Damage	Medium	43	Slabs	Joint Seal (Localized)	\$3.14	\$2,537
A01OT	08	Joint Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	\$39.04	\$252
R13OT	01	Joint Spalling	Medium	10	Slabs	Patching - PCC Partial Depth	\$39.04	\$2,425
TAOT	01	L&T Cracking	Medium	1,380	Ft	Crack Sealing - AC	\$2.61	\$3,601
TAOT	01	Raveling	Medium	5	SqFt	Patching - AC Deep	\$15.24	\$79
TBOT	07	Corner Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	\$39.04	\$119
TBOT	07	Joint Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	\$39.04	\$285

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 Ottumwa Regional Airport.



PREPARED FOR

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