Chariton Municipal Airport

Pavement Management Report

PREPARED BY

Applied Pavement Technology, Inc. 1908 South First Street, Suite 201 Champaign, Illinois 61820 (217) 398-3977 www.appliedpavement.com

AUGUST 2025







CHARITON MUNICIPAL AIRPORT PAVEMENT MANAGEMENT REPORT

Prepared For:



Iowa Department of Transportation Modal Transportation Bureau 800 Lincoln Way Ames, Iowa 50010 515-239-1101 https://iowadot.gov/modes-travel/aviation

Prepared By:



Applied Pavement Technology, Inc. 1908 South First Street, Suite 201 Champaign, Illinois 61820 217-398-3977 https://www.appliedpavement.com

In Association With:



Robinson Engineering Company Consulting Engineers 819 Second Street NE Independence, Iowa 50644 319-334-7211

TABLE OF CONTENTS

INTRODUCTION	
PAVEMENT INVENTORY	3
PAVEMENT EVALUATION	
Pavement Evaluation Procedure	
Pavement Evaluation Results	
Inspection Comments	
Runways	
Taxiways	
Aprons	
T-Hangar	
PAVEMENT MAINTENANCE AND REHABILITATION PROGRAM	
Analysis Parameters	
Critical PCIs	
Localized Preventive Maintenance Policies and Unit Costs	
Major Rehabilitation Unit Costs	
Budget and Inflation Rate	
Analysis Approach	
Analysis Results	
General Maintenance Recommendations	
FAA Requirements (Public Law 103-305)	
FAA Advisory Circular 150/5830-7B, Appendix A. Pavement Management Program	
SUMMARY	
REFERENCES	24
LIST OF FIGURES	
Figure 1. Pavement condition versus cost of repair.	
Figure 2. Pavement area by branch use at Chariton Municipal Airport	
Figure 3. Chariton Municipal Airport network definition map.	
Figure 4. Visual representation of PCI scale on typical pavement surfaces	
Figure 5. PCI versus repair type	
Figure 6. Pavement area by PCI range at Chariton Municipal Airport	
Figure 7. Area-weighted PCI by branch use at Chariton Municipal Airport	
Figure 8. Chariton Municipal Airport PCI map	10
LIST OF TABLES	
Table 1. 2025 pavement evaluation results	11
Table 1. 2025 pavernerit evaluation results	
Table 3. Pavement inspection report	
Table 5. Lavernetit inspection report	∠ U

APPENDIXES

Appendix A. Cause of Distress Tables	A-1
Appendix B. Inspection Photographs	
Appendix C. Inspection Report	
Appendix D. Work History Report	
Appendix E. Localized Preventive Maintenance Policies and Unit Cost Tables	
Appendix F. Year 2025 Localized Preventive Maintenance Details	

Introduction August 2025

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 Chariton Municipal Airport were visually assessed in March 2025 using the Pavement Condition Index (PCI) procedure. During a PCI inspection, the types, severities, and amounts of distress present on the pavement surface 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 data and results are 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.

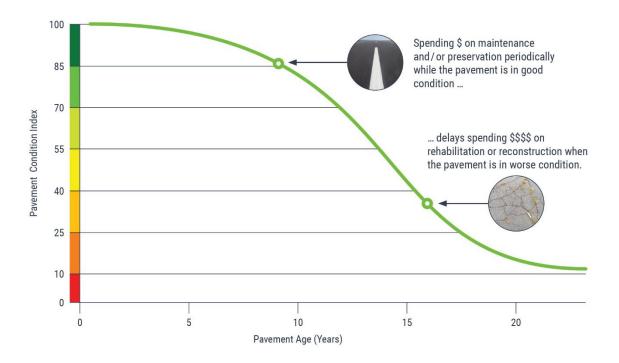


Figure 1. Pavement condition versus cost of repair.

Introduction August 2025

The pavement evaluation results for Chariton Municipal Airport are presented within this report and can be used by Chariton Municipal Airport, the Iowa DOT, and the Federal Aviation Administration (FAA) to identify, prioritize, and schedule pavement M&R actions at the airport. In addition to this report, the 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 August 2025

PAVEMENT INVENTORY

The project began with a review of the existing inventory information pertaining to the pavements at Chariton Municipal Airport. The date of original construction, along with the date of any subsequent rehabilitation; the location of completed work; and the type of work undertaken were gathered. The information was used to update the pavement management database and associated maps, as necessary, to account for pavement-related work that had been undertaken since the last time the airport was evaluated in 2021.

The pavement network at Chariton Municipal Airport was then divided into branches, sections, and sample units. A branch is a single entity that serves a distinct function. For example, a runway is considered a branch because it serves a single function (allowing aircraft to take off and land). Taxiways, aprons, and T-hangars are also separate branches.

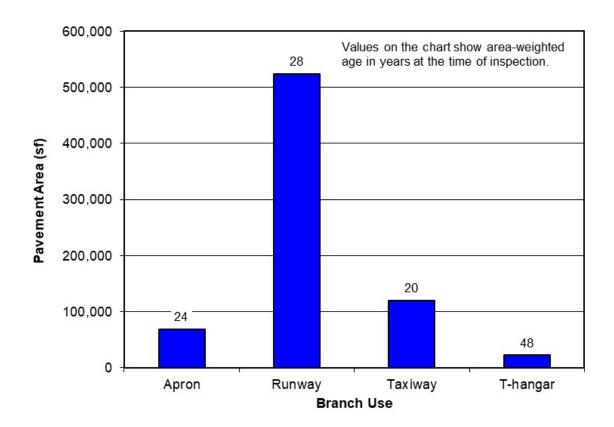
Each branch was further divided into sections. Traditionally, sections are defined as parts of the branch that share common attributes, such as cross section, date of last construction, traffic level, and performance. Using this approach, if a runway was built in 1968 and then extended in 1984, it would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

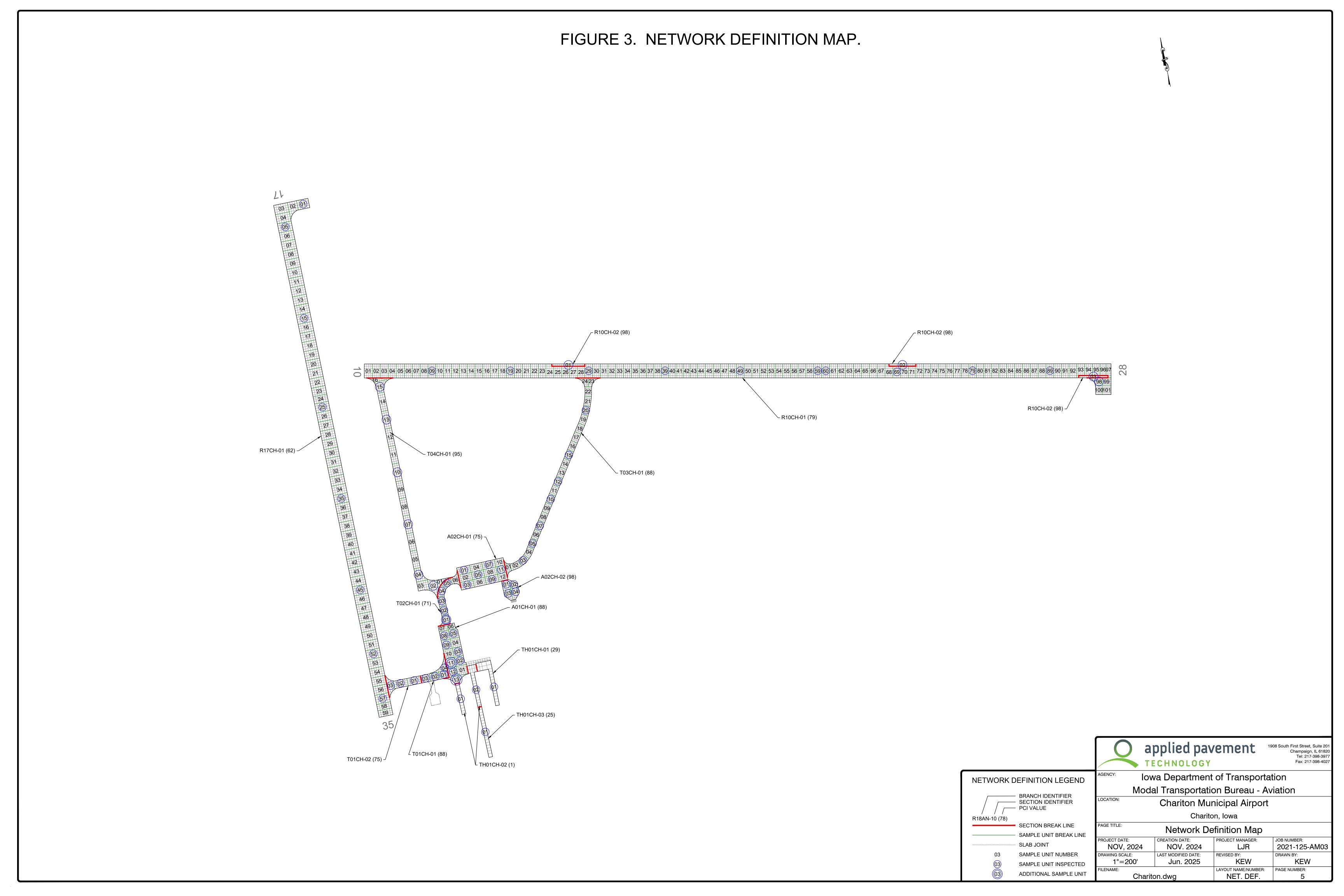
To estimate the overall condition of a pavement section, each section was subdivided into sample units. Portions of these sample units were evaluated during the pavement inspection, and the collected information was extrapolated to predict the overall section condition and quantities of distress.

Approximately 733,800 square feet of pavement were evaluated at Chariton Municipal Airport, as illustrated in Figure 2. This figure also shows the area-weighted age in years of the pavements at the time of the inspection. Figure 3 provides a map that details how the pavement network was divided into management units and identifies the sample units that were evaluated during the pavement inspection at Chariton Municipal Airport.

Pavement Inventory August 2025

Figure 2. Pavement area by branch use at Chariton Municipal Airport.





PAVEMENT EVALUATION

Pavement Evaluation Procedure

APTech visually inspected the pavements at Chariton Municipal Airport using the PCI procedure described in:

- FAA Advisory Circular 150/5380-6C, <u>Guidelines and Procedures for Maintenance of</u> Airport Pavements.
- FAA Advisory Circular 150/5380-7B, Airport Pavement Management Program (PMP).
- ASTM D5340, Standard Test Method for Airport Pavement Condition Index Surveys.

During the PCI inspection, a cursory inspection of the entirety of a pavement section was performed. Sample units identified for more detailed inspection were verified, and adjustments to the selected sample units for inspection were made as needed to ensure an accurate assessment of the pavement's condition. Data pertaining to the types, severities, and quantities of observed pavement distresses were then collected within each sample unit. These data were then used to calculate the composite PCI of each pavement section. The PCI provides a numerical indication of overall pavement condition, as illustrated in Figure 4. 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 with no visible signs of deterioration. 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.

PCI: 100

PCI: 83

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

Note: Photographs shown are not specific to Chariton Municipal Airport.

PCI: 66

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

86-100

71-85

Preventive Maintenance

56-70

Major Rehabilitation

26-40

11-25

Reconstruction

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 asphaltsurfaced 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 Chariton Municipal Airport were inspected in March 2025. The 2025 area-weighted condition of Chariton Municipal Airport is 74, with conditions ranging from 1 to 98 (on a scale of 0 [failed] to 100 [excellent]). During the previous pavement inspection in 2021, the area-weighted PCI of the airport was 76.

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



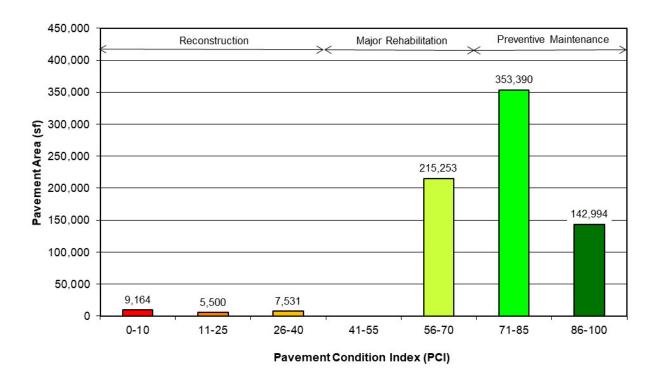
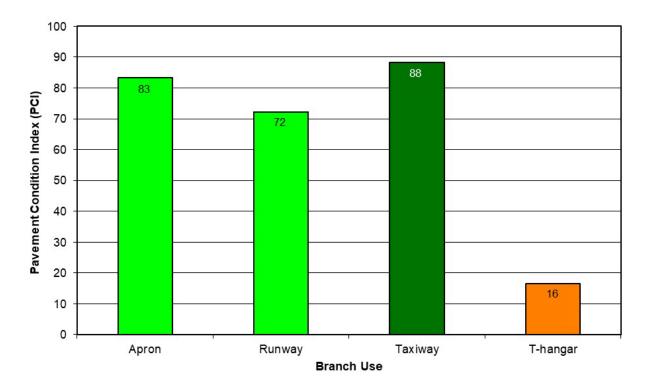
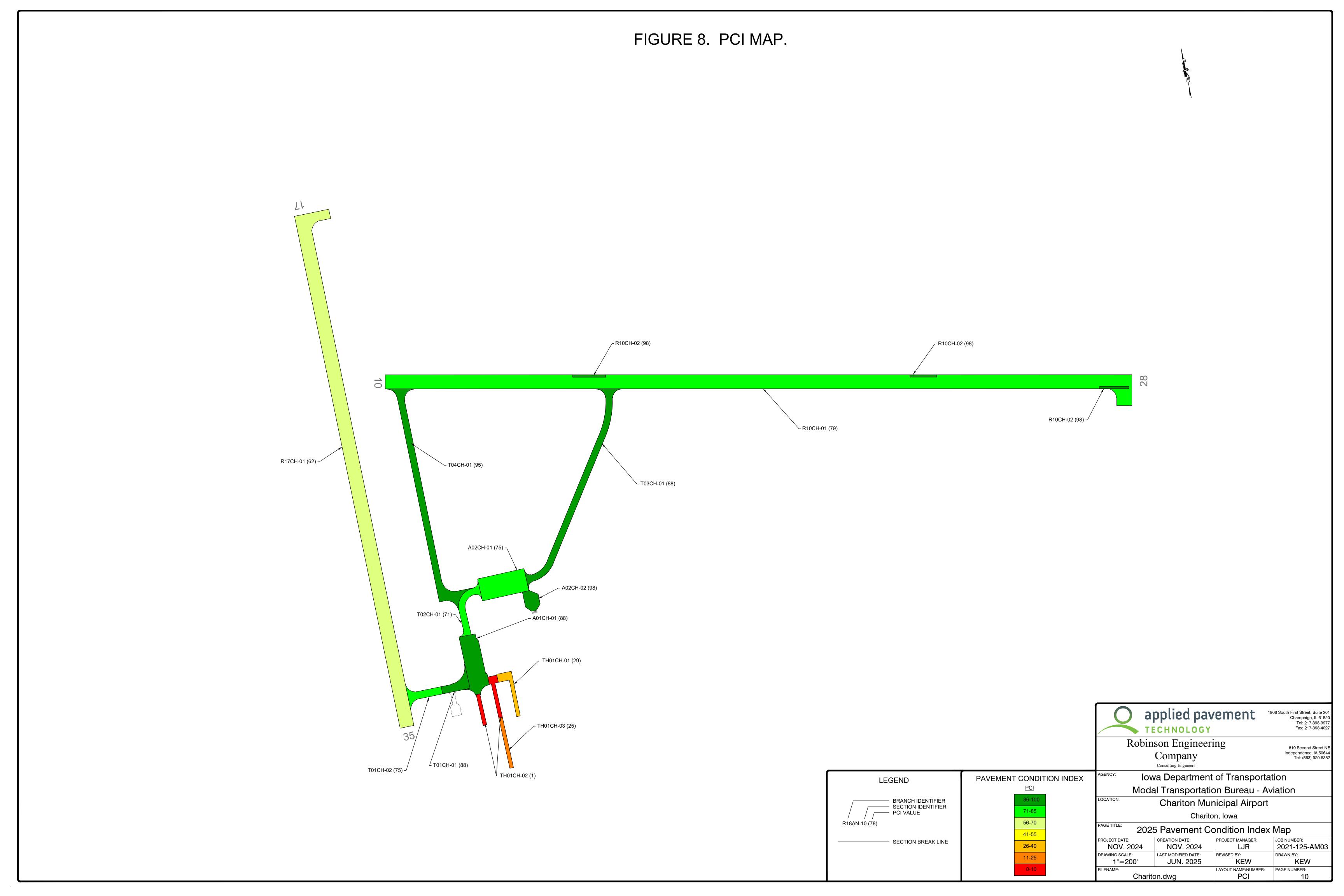


Figure 7. Area-weighted PCI by branch use at Chariton Municipal Airport.

(Values on chart are area weighted.)





Pavement Evaluation

Table 1. 2025 pavement evaluation results.

Branch	Section	Surface Type	Section Area (sf)	LCD	2025 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
A01CH	01	PCC	30,018	5/1/2000	88	41	41	18	ASR, Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shattered Slab
A02CH	01	PCC	30,600	6/1/1996	75	0	20	80	ASR, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Small Patch
A02CH	02	PCC	7,583	6/3/2024	98	0	0	100	Faulting
R10CH	01	PCC	302,631	6/1/1996	79	15	23	62	ASR, Corner Break, Corner Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch
R10CH	02	PCC	5,963	7/1/2018	98	0	100	0	Joint Seal Damage
R17CH	01	PCC	215,253	6/2/1997	62	46	14	40	ASR, Corner Break, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shattered Slab, Small Patch
T01CH	01	PCC	8,180	5/1/2000	88	43	42	15	Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shrinkage Cracking
T01CH	02	PCC	8,728	6/1/1997	75	15	22	63	ASR, Corner Break, Faulting, Joint Spalling, Joint Seal Damage, LTD Cracking, Scaling, Shrinkage Cracking
T02CH	01	PCC	11,431	6/1/1996	71	21	15	64	ASR, Corner Break, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shrinkage Cracking
T03CH	01	PCC	42,207	6/1/1996	88	0	45	55	ASR, Faulting, Joint Spalling, Joint Seal Damage, Scaling
T04CH	01	PCC	49,043	1/1/2017	95	0	74	26	Corner Spalling, Faulting, Joint Seal Damage

Pavement Evaluation

Table 1. 2023 pavement evaluation results (continued).

Branch	Section	Surface Type	Section Area (sf)	LCD	2025 PCI	% Distress Due to Load	% Distress Due to Climate/ Durability	% Distress Due to Other	Type of Distress
TH01CH	01	PCC	7,531	1/1/1977	29	52	11	37	ASR, Corner Spalling, Faulting, Joint Seal Damage, LTD Cracking, Shrinkage Cracking
TH01CH	02	PCC	9,164	1/1/1977	1	35	32	33	ASR, Blowup, Corner Break, Corner Spalling, Joint Spalling, Joint Seal Damage, LTD Cracking, Scaling, Shattered Slab
TH01CH	03	PCC	5,500	1/1/1977	25	73	11	16	ASR, Joint Seal Damage, LTD Cracking, Shattered Slab

Table Notes:

- 1. See Figure 3 for the location of the branch and section.
- 2. Surface Type: AC = asphalt cement concrete; AAC = asphalt overlay on AC; PCC = portland cement concrete; APC = asphalt overlay on PCC.
- 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. L&T cracking = longitudinal and transverse cracking; LTD cracking = longitudinal, transverse, and diagonal cracking; ASR = alkali-silica reaction.

Inspection Comments

Chariton Municipal Airport was inspected on March 27, 2025. There were 14 pavement sections defined during the inspection. Alkali-silica reaction (ASR) was recorded at this airport according to the PCI procedure. The ASR was recorded where evidence of a precipitate was observed within some of the cracking in the PCC surface. 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 10/28 was comprised of two sections. Low-severity ASR, corner break, and small patching were observed in Section 01 along with medium- and high-severity corner spalling; medium-severity joint seal damage; high-severity large patching; and low- and medium-severity longitudinal, transverse, and diagonal (LTD) cracking. Section 02 was in *Excellent* condition and only contained low-severity joint seal damage throughout.

Runway 17/35 consisted of one section that contained areas of low-severity ASR, corner break, and small patching. Other distresses such as low- and medium-severity corner spalling, faulting, joint seal damage, joint spalling, and LTD cracking were observed along with low-severity large patching and medium-severity shattered slab.

Taxiways

Taxiway 01 contained two sections. Medium-severity joint seal damage, low- and medium-severity joint spalling, low-severity large patching and LTD cracking, and shrinkage cracking were noted in Section 01. Areas of low-severity ASR, corner break, and scaling were observed in Section 02. In addition, low- and medium-severity faulting and joint spalling, medium-severity joint seal damage and LTD cracking, and shrinkage cracking were recorded.

Taxiway 02 consisted of one section that connected the two main apron areas. Low- and medium-severity ASR, corner spalling, and LTD cracking were identified in Section 01. Medium-severity corner break, joint seal damage, and joint spalling; low-severity large patching; and shrinkage cracking were also observed. An typical area of all severities of faulting was noted and recorded as an additional sample unit in accordance with ASTM D5340.

Taxiway 03 was defined by one section. Medium-severity joint seal damage and joint spalling and low-severity ASR, faulting, and scaling were recorded in this section.

Taxiway 04 consisted of one section with low-severity corner spalling, low-severity faulting, and low- and medium-severity joint seal damage.

Aprons

The apron area contained one section with low-severity ASR and large patching; medium-severity corner spalling; and low- and medium-severity joint seal damage, LTD cracking, and joint spalling. Atypical areas of low-severity corner break and shattered slab were observed and recorded as additional sample units in accordance with ASTM D5340.

Apron 02 consisted of two sections. Areas of low- and medium-severity ASR and faulting, medium-severity corner spalling and joint seal damage, medium- and high-severity joint spalling, and low- and high-severity small patching were observed in Section 01. Section 02 was recently constructed and was in *Excellent* condition. Only low-severity faulting was recorded at the time of inspection.

T-Hangar

The T-hangar area was comprised of three sections. Section 01 was in *Poor* condition with areas of low-severity ASR, high-severity corner spalling and joint seal damage, medium- and high-severity faulting, low- and medium-severity LTD cracking, and shrinkage cracking. Section 02 was also in *Poor* condition and had a variety of distresses including all severities of ASR; medium- and high-severity blow-up, joint spalling, LTD cracking, scaling, and shattered slab; medium-severity corner break and corner spalling; and high-severity joint seal damage. Low-severity ASR, high-severity joint seal damage, and medium-severity LTD cracking and shattered slab were recorded in Section 03.

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 Chariton Municipal Airport. In addition, a 1-year plan for localized preventive maintenance (such as crack sealing and patching) was prepared.

Analysis Parameters

Critical PCIs

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

Localized Preventive Maintenance Policies and Unit Costs

Localized preventive maintenance policies were developed for asphalt-surfaced and PCC pavements. These policies, shown in Appendix E, identify the localized preventive maintenance actions that the lowa DOT considered appropriate to correct the different distress types and severities. The lowa 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 adjustments to reflect specific conditions at Chariton Municipal Airport.

Major Rehabilitation Unit Costs

PAVER estimates the cost of major rehabilitation based on the predicted PCI of the pavement section. The lowa 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, 2025, and an inflation rate of 2.3 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 (2025) 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 2026 or 2027, then localized preventive maintenance was not recommended for 2025. While localized preventive maintenance should be an annual undertaking at Chariton Municipal Airport, it is not possible to accurately predict the propagation of cracking and other distress types. Therefore, the airport should budget for maintenance every year and can use the 2025 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 Chariton Municipal Airport is presented in Table 2. Detailed information on the recommended localized preventive maintenance plan for 2025 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
2025	A01CH	01	PCC	Preventive Maintenance	\$16,696
2025	A02CH	01	PCC	Preventive Maintenance	\$24,211
2025	R10CH	01	PCC	Preventive Maintenance	\$186,285
2025	R17CH	01	PCC	Major Rehabilitation	\$1,919,975
2025	T01CH	01	PCC	Preventive Maintenance	\$3,570
2025	T01CH	02	PCC	Preventive Maintenance	\$4,878
2025	T02CH	01	PCC	Preventive Maintenance	\$16,690
2025	T03CH	01	PCC	Preventive Maintenance	\$27,224
2025	T04CH	01	PCC	Preventive Maintenance	\$4,983
2025	TH01CH	01	PCC	Major Rehabilitation	\$142,037
2025	TH01CH	02	PCC	Major Rehabilitation	\$172,835
2025	TH01CH	03	PCC	Major Rehabilitation	\$103,731

Total Estimated Cost: \$2,623,000

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 adjustments to reflect specific conditions at Chariton Municipal Airport.

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

Because an unlimited budget was used in the analysis, it is possible that the pavement repair program may need to be adjusted to consider economic or operational constraints. The identification of a project need does not necessarily mean that State or Federal funding will be available in the year it is indicated. It is important to remember that regardless of the recommendations presented within this report, Chariton Municipal Airport is responsible for repairing pavements where existing conditions pose a hazard to safe operations.

General Maintenance Recommendations

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

- 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 because of these inspections. This documentation needs to be reported to the FAA and the lowa 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 for extending the life of the pavement system.
- 5. Ensure all edges of pavement maintain the required 1.5-inch lip. This enables the water to drain away from the pavement system.
- 6. Closely monitor the movement of heavy equipment (particularly farming, construction, mowing, 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 Chariton Municipal Airport is in the National Plan of Integrated Airport Systems (NPIAS), the airport sponsor is required to keep the airport in a viable operating condition. This includes maintaining airport pavements in accordance with Public Law 103-305. Public Law 103-305 states that after January 1, 1995, NPIAS airport sponsors must provide assurances or certifications that an airport has implemented an effective airport pavement maintenance management system (PMMS) before the airport will be considered for Federal funding of pavement replacement or reconstruction projects. To be in full compliance with the Federal law, the PMMS must include the following components at minimum: pavement inventory, pavement inspections, record keeping, information retrieval, and program funding.

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

FAA Advisory Circular 150/5380-7B provides detailed guidance pertaining to the requirements for an acceptable pavement management program. 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 text is a direct quotation from the FAA Advisory Circular.

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

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

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

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

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

b. Dimensions of pavement sections.

The dimensions of all runways, taxiways, aprons, and T-hangars are stored in the PAVER database. Appendix C provides information on length, width, and area. In addition, the network definition map 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 Chariton Municipal 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 Chariton Municipal Airport is provided in Appendix D of this report.

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

Funding sources for all pavement projects should be recorded.

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

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

A-1.3. Record Keeping. The airport must record and keep on file complete information about all detailed inspections and maintenance performed until the pavement system is replaced. The

types of distress, their locations, and remedial action, scheduled or performed, must be documented. The minimum information recorded includes:

- a. Inspection date
- b. Location
- c. Distress types
- d. Maintenance scheduled or performed

Items A through C are satisfied by this inspection report. Item D is the responsibility of the airport, as is record keeping of the monthly drive-by inspections.

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

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

Pavement Maintenance and Rehabilitation Program

Inspected By:		

Date Inspected:

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
A01CH	01					
A02CH	01					
A02CH	02					
R10CH	01					
R10CH	02					
R17CH	01					

Pavement Maintenance and Rehabilitation Program

Table 3	Pavement	inspection	report ((continued)
Table 5.	I aveillell	IIISPECTION	1 CPOIL	(COHUHUCU)

Inspected By:	_
Date Inspected:	

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
T01CH	01					
T01CH	02					
T02CH	01					
тозсн	01					
T04CH	01					
TH01CH	01					

Pavement Maintenance and Rehabilitation Program

Inspected By:	
Date Inspected:	

Branch	Section	Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
TH01CH	02					
TH01CH	03					

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

Summary August 2025

SUMMARY

This report documents the results of the pavement evaluation conducted at Chariton Municipal Airport. A visual inspection of the pavements in 2025 found that the overall condition of the pavement network is a PCI of 74. A 5-year pavement repair program, shown in Table 2, was generated for Chariton Municipal Airport, which revealed that approximately \$2,623,000 needs to be expended on M&R. Chariton Municipal Airport should utilize these study results to assist in planning for future maintenance needs as part of the airport CIP planning process.

References August 2025

REFERENCES

ASTM International (ASTM). Standard Test Method for Airport Pavement Condition Index Surveys. D5340. ASTM International, West Conshohocken, PA.

Federal Aviation Administration Authorization Act of 1994. Public Law No. 103-305. Vol 108 Stat. 1569. 1994.

Federal Aviation Administration (FAA). <u>Guidelines and Procedures for Maintenance of Airport Pavements</u>. Advisory Circular 150/5380-6C. Federal Aviation Administration, Washington, DC.

Federal Aviation Administration (FAA). <u>Airport Pavement Management Program (PMP)</u>. Advisory Circular 150/5380-7B. Federal Aviation Administration, Washington, DC.

US Army Corps of Engineers (USACE). 2009. <u>Asphalt Surfaced Airfields</u>. PAVER Distress Identification Manual. USACE, Washington, DC.

US Army Corps of Engineers (USACE). 2009. <u>Concrete Surfaced Airfields</u>. PAVER Distress Identification Manual. USACE, Washington, DC.

US Army Corps of Engineers (USACE). 2021. PAVER. (Software). US Army Corps of Engineers, Transportation Systems Center, Omaha, NE.

APPENDIX A CAUSE OF DISTRESS TABLES

Cause of Distress Tables August 2025

Table A-1. Cause of pavement distress, asphalt-surfaced pavements (USACE 2009a).

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 August 2025

Table A-2. Cause of pavement distress, PCC pavements (USACE 2009b).

Distress Type	Probable Cause of Distress			
ASR	Chemical reaction of alkalis in the 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

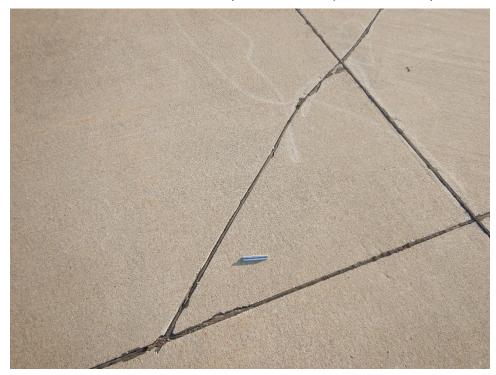
A01CH-01. Overview.



A01CH-01. ASR (Sample Unit No. 08).



A01CH-01. Corner Break (Additional Sample Unit No. 11).



A01CH-01. LTD Cracking (Sample Unit No. 03).



A01CH-01. Large Patching (Additional Sample Unit No. 13).



A01CH-01. Shattered Slab (Additional Sample Unit No. 13).



A02CH-01. Overview.



A02CH-01. ASR (Sample Unit No. 007).



A02CH-01. ASR (Sample Unit No. 011).



A02CH-02. Overview.



A02CH-02. Faulting (Sample Unit No. 01).



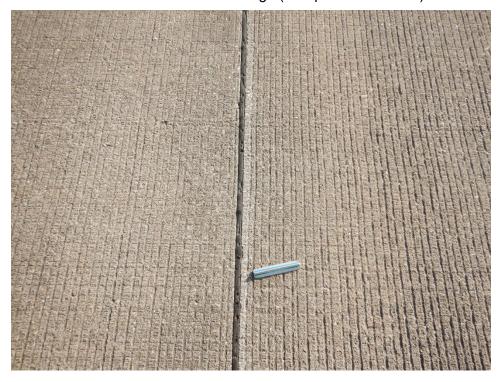
R10CH-01. Overview.



R10CH-01. ASR (Sample Unit No. 019).



R10CH-01. Joint Seal Damage (Sample Unit No. 019).



R10CH-01. Large Patching (Sample Unit No. 39).



R10CH-02. Overview.



R10CH-02. Joint Seal Damage (Sample Unit No. 03).



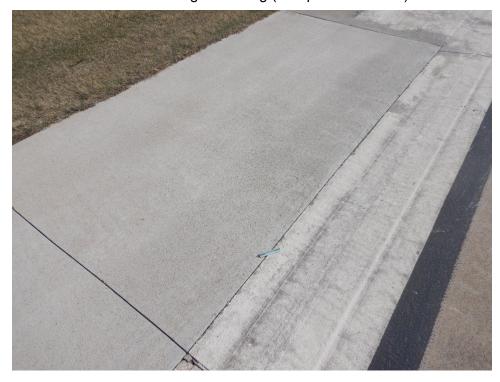
R17CH-01. Overview.



R17CH-01. LTD Cracking (Sample Unit No. 05).



R17CH-01. Large Patching (Sample Unit No. 05).



R17CH-01. Shattered Slab (Sample Unit No. 57).



T01CH-01. Overview.



T01CH-01. LTD Cracking (Sample Unit No. 04).



T01CH-01. Large Patching (Sample Unit No. 04).



T01CH-02. Overview.



T01CH-02. ASR (Sample Unit No. 002).



T01CH-02. Joint Spalling (Sample Unit No. 002).



T02CH-01. Overview.



T02CH-01. ASR (Sample Unit No. 001).



T02CH-01. Corner Break (Sample Unit No. 005).



T02CH-01. Faulting (Sample Unit No. 001).



T02CH-01. LTD Cracking (Sample Unit No. 003).



T03CH-01. Overview.



T03CH-01. Joint Seal Damage (Sample Unit No. 020).



T03CH-01. Joint Spalling (Sample Unit No. 020).



T04CH-01. Overview.



T04CH-01. Corner Spalling (Sample Unit No. 007).



T04CH-01. Joint Seal Damage (Sample Unit No. 004).



TH01CH-01. Overview.



TH01CH-01. Joint Seal Damage (Sample Unit No. 01).



TH01CH-01. LTD Cracking (Sample Unit No. 01).



TH01CH-02. Overview.



TH01CH-02. Blow-Up (Sample Unit No. 02).



TH01CH-02. Shattered Slab (Sample Unit No. 01) (1).



TH01CH-02. Shattered Slab (Sample Unit No. 01) (2).



TH01CH-03. Overview.



TH01CH-03. LTD Cracking (Sample Unit No. 01) (1).



TH01CH-03. LTD Cracking (Sample Unit No. 01) (2).



APPENDIX C INSPECTION REPORT

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 1

Network ID: CNC			Page 1
	Branch - Sect	ion ID: A01CH - 001	
Branch Name: APRON 01			Use: APRON
LCD: 5/1/2000 Surface Type: PCC Rank: P Section Area (sf): 30,018.00 Length (ft): 290.00 Width (ft): 100.00 From: BUILDINGS To: TAXIWAY		PCI Family: lowaPCCAP_SC_Basic	
Slabs: 300 Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 5,599.91		Section Comments:	
Last Insp Date: 3/27/2025 PCI: 88 Total Samples: 13 Surveyed: 8		Inspection Comments:	
Sample Number: 02			
Sample Type: R Sample PCI: 89 Sample Area (Slabs): 25.00		Sample Comments:	
63 LINEAR CR 65 JT SEAL DMG	L M	1.00 Slabs 25.00 Slabs	
Sample Number: 03		20.00 0.000	
Sample Type: R Sample PCI: 84 Sample Area (Slabs): 25.00		Sample Comments:	
63 LINEAR CR 65 JT SEAL DMG	L M	3.00 Slabs 25.00 Slabs	
74 JOINT SPALL	L L	1.00 Slabs	
Sample Number: 05			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 25.00		Sample Comments:	
65 JT SEAL DMG	L	25.00 Slabs	
Sample Number: 08			
Sample Type: R Sample PCI: 89 Sample Area (Slabs): 25.00		Sample Comments:	
65 JT SEAL DMG 76 ASR	M L	25.00 Slabs 1.00 Slabs	
Sample Number: 09			

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (Slabs): 25.00

65 JT SEAL DMG M 25.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025 Network ID: CNC Page 2 Sample Number: 11 Sample Type: A Sample Comments: Sample PCI: 90 Sample Area (Slabs): 25.00 **62 CORNER BREAK** L 1.00 Slabs 65 JT SEAL DMG Μ 25.00 Slabs Sample Number: 12 Sample Type: R Sample Comments: Sample PCI: 93 Sample Area (Slabs): 25.00 65 JT SEAL DMG Μ 25.00 Slabs Sample Number: 13 Sample Type: A Sample Comments: Sample PCI: 61 Sample Area (Slabs): 28.00

62 CORNER BREAK 1.00 Slabs L L 3.00 Slabs 63 LINEAR CR 63 LINEAR CR Μ 1.00 Slabs 65 JT SEAL DMG Μ 28.00 Slabs **67 LARGE PATCH** 1.00 Slabs L 72 SHAT. SLAB L 1.00 Slabs 74 JOINT SPALL Μ 2.00 Slabs 75 CORNER SPALL Μ 2.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC

Network ID: CNC				
	Branch - Section	Branch - Section ID: A02CH - 001		
Branch Name: APRON 02			Use: APRO	
LCD: 6/1/1996 Surface Type: PCC Rank: P Section Area (sf): 30,600.00 Length (ft): 250.00 Width (ft): 120.00 From: TAXIWAY 02 To: TAXIWAY 03	Ţ	PCI Family: lowaPCCAP_SC_Basic		
Slabs: 306 Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 5,742.60	,	Section Comments:		
Last Insp Date: 3/27/2025 PCI: 75 Total Samples: 12 Surveyed: 6	1	nspection Comments:		
Sample Number: 001				
Sample Type: R Sample PCI: 64 Sample Area (Slabs): 28.00	:	Sample Comments:		
65 JT SEAL DMG 74 JOINT SPALL 74 JOINT SPALL 76 ASR 76 ASR	M H M L M	28.00 Slabs 1.00 Slabs 1.00 Slabs 15.00 Slabs 1.00 Slabs		
Sample Number: 003				
Sample Type: R Sample PCI: 77 Sample Area (Slabs): 28.00	:	Sample Comments:		
65 JT SEAL DMG 71 FAULTING 71 FAULTING 76 ASR	M L M L	28.00 Slabs 1.00 Slabs 2.00 Slabs 1.00 Slabs		
Sample Number: 005				
Sample Type: R Sample PCI: 75 Sample Area (Slabs): 28.00	,	Sample Comments:		
65 JT SEAL DMG 66 SMALL PATCH 66 SMALL PATCH 76 ASR	M H L L	28.00 Slabs 1.00 Slabs 3.00 Slabs 8.00 Slabs		
Sample Number: 007				

Sample Type: R Sample Comments:

Sample PCI: 78

Sample Area (Slabs): 28.00

65 JT SEAL DMG 28.00 Slabs M 76 ASR L 13.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 4

Sample Number: 009

Sample Type: R Sample Comments:

Sample PCI: 77

Sample Area (Slabs): 28.00

 65 JT SEAL DMG
 M
 28.00 Slabs

 74 JOINT SPALL
 M
 1.00 Slabs

 75 CORNER SPALL
 M
 1.00 Slabs

 76 ASR
 L
 6.00 Slabs

Sample Number: 011

Sample Type: R Sample Comments:

Sample PCI: 77

Sample Area (Slabs): 20.00

65 JT SEAL DMG M 20.00 Slabs 76 ASR L 10.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 5

Branch - Section ID: A02CH - 002

PCI Family: IowaPCCAP SC Basic

Branch Name: APRON 02 Use: APRON

LCD: 6/3/2024 Surface Type: PCC

Rank: P

Section Area (sf): 7,583.00

Length (ft): 120.00 Width (ft): 80.00 From: SEE MAP To: SEE MAP

Slabs: 77 Section Comments:

Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 1,358.62

Last Insp Date: 3/27/2025 Inspection Comments:

PCI: 98 Total Samples: 4 Surveyed: 4

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 92

Sample Area (Slabs): 20.00

71 FAULTING L 2.00 Slabs

Sample Number: 02

Sample Type: R Sample Comments:

Sample PCI: 100

Sample Area (Slabs): 15.00

NO DISTRESS

Sample Number: 03

Sample Type: R Sample Comments:

Sample PCI: 100

Sample Area (Slabs): 21.00

NO DISTRESS

Sample Number: 04

Sample Type: R Sample Comments:

Sample PCI: 100

Sample Area (Slabs): 21.00

NO DISTRESS

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page			
	Branch - Section ID: R10CH - 001		
Branch Name: RUNWAY 10/28			Use: RUNWA
LCD: 6/1/1996 Surface Type: PCC Rank: P Section Area (sf): 302,631.00 Length (ft): 4,000.00 Width (ft): 75.00 From: TAXIWAY 04 To: NE END RUNWAY 10	PC	CI Family: lowaPCCRW_SC_Bas	ic
Slabs: 2,374 Slab Length (ft): 10.20 Slab Width (ft): 12.50 Joint Length (ft): 49,769.45	Se	ction Comments:	
Last Insp Date: 3/27/2025 PCI: 79 Total Samples: 101 Surveyed: 11	Ins	spection Comments:	
Sample Number: 009			
Sample Type: R Sample PCI: 88 Sample Area (Slabs): 24.00 65 JT SEAL DMG 76 ASR	Sa M L	mple Comments: 24.00 Slabs 2.00 Slabs	
Sample Number: 019	-		
Sample Type: R Sample PCI: 81 Sample Area (Slabs): 24.00 65 JT SEAL DMG 76 ASR	Sa M L	mple Comments: 24.00 Slabs 7.00 Slabs	
Sample Number: 029			
Sample Type: R Sample PCI: 89 Sample Area (Slabs): 24.00	Sa	mple Comments:	
65 JT SEAL DMG 76 ASR	M L	24.00 Slabs 1.00 Slabs	
Sample Number: 039			
Sample Type: R Sample PCI: 65 Sample Area (Slabs): 24.00	Sa	mple Comments:	
65 JT SEAL DMG 67 LARGE PATCH 76 ASR	M H L	24.00 Slabs 2.00 Slabs 5.00 Slabs	
Sample Number: 049			

Sample Number: 049

Sample Type: R Sample Comments:

Sample PCI: 84

Sample Area (Slabs): 24.00

65 JT SEAL DMG 24.00 Slabs Μ 76 ASR L 4.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025 Network ID: CNC Page 7 Sample Number: 059 Sample Type: R Sample Comments: Sample PCI: 79 Sample Area (Slabs): 24.00 65 JT SEAL DMG Μ 24.00 Slabs 4.00 Slabs 66 SMALL PATCH L 7.00 Slabs 76 ASR L Sample Number: 060 Sample Type: R Sample Comments: Sample PCI: 86 Sample Area (Slabs): 24.00 65 JT SEAL DMG Μ 24.00 Slabs 76 ASR L 3.00 Slabs Sample Number: 069 Sample Type: R Sample Comments: Sample PCI: 74 Sample Area (Slabs): 20.00 65 JT SEAL DMG Μ 20.00 Slabs 75 CORNER SPALL Н 1.00 Slabs 76 ASR L 8.00 Slabs Sample Number: 079 Sample Type: R Sample Comments: Sample PCI: 77 Sample Area (Slabs): 24.00 65 JT SEAL DMG 24.00 Slabs Μ 13.00 Slabs 76 ASR L Sample Number: 089 Sample Type: R Sample Comments: Sample PCI: 72 Sample Area (Slabs): 24.00 63 LINEAR CR Μ 2.00 Slabs 65 JT SEAL DMG Μ 24.00 Slabs 76 ASR L 6.00 Slabs Sample Number: 098 Sample Type: R Sample Comments: Sample PCI: 75 Sample Area (Slabs): 22.00 **62 CORNER BREAK** L 1.00 Slabs L 1.00 Slabs 63 LINEAR CR

М

Μ

L

22.00 Slabs

1.00 Slabs

2.00 Slabs

65 JT SEAL DMG

76 ASR

75 CORNER SPALL

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 8

Branch - Section ID: R10CH - 002

Branch Name: RUNWAY 10/28

Use: RUNWAY

LCD: 7/1/2018

Surface Type: PCC

Rank: P

Section Area (sf): 5,962.50

Length (ft): 477.00 Width (ft): 12.50 From: SEE MAP To: SEE MAP

Slabs: 46 Section Comments: avg slabs

Slab Length (ft): 10.40 Slab Width (ft): 12.10 Joint Length (ft): 576.59

Last Insp Date: 3/27/2025

PCI: 98 Total Samples: 3 Surveyed: 3 Inspection Comments:

Sample Comments:

Sample Comments:

PCI Family: IowaPCCRW SC Basic

Sample Number: 01

Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 17.00

65 JT SEAL DMG L 17.00 Slabs

Sample Number: 02

Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 14.00

65 JT SEAL DMG L 14.00 Slabs

Sample Number: 03

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 15.00

65 JT SEAL DMG L 15.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 9

Network ID: CNC			Page 9
Branch Name: RUNWAY 17/35	Branch - Sectio	n ID: R17CH - 001	Use: RUNWAY
LCD: 6/2/1997 Surface Type: PCC Rank: S Section Area (sf): 215,253.00 Length (ft): 2,800.00 Width (ft): 75.00 From: RUNWAY END 17 To: RUNWAY END 35	F	PCI Family: IowaPCCRW_SC_Basic	
Slabs: 1,378 Slab Length (ft): 12.50 Slab Width (ft): 12.50 Joint Length (ft): 31,493.56	5	Section Comments:	
Last Insp Date: 3/27/2025 PCI: 62 Total Samples: 58 Surveyed: 8	l	nspection Comments:	
Sample Number: 01			
Sample Type: R Sample PCI: 55 Sample Area (Slabs): 20.00	\$	Sample Comments:	
63 LINEAR CR 63 LINEAR CR 65 JT SEAL DMG 67 LARGE PATCH 75 CORNER SPALL 75 CORNER SPALL	L M M L L	2.00 Slabs 3.00 Slabs 20.00 Slabs 1.00 Slabs 1.00 Slabs 2.00 Slabs	
Sample Number: 05			
Sample Type: R Sample PCI: 57 Sample Area (Slabs): 24.00	ξ	Sample Comments:	
63 LINEAR CR 63 LINEAR CR 65 JT SEAL DMG 67 LARGE PATCH 71 FAULTING 74 JOINT SPALL 75 CORNER SPALL	L M L L M L	1.00 Slabs 4.00 Slabs 24.00 Slabs 1.00 Slabs 1.00 Slabs 2.00 Slabs 1.00 Slabs	
Sample Number: 15			
Sample Type: R Sample PCI: 67 Sample Area (Slabs): 24.00	8	Sample Comments:	
65 JT SEAL DMG 71 FAULTING 71 FAULTING 75 CORNER SPALL	L L M M	24.00 Slabs 6.00 Slabs 1.00 Slabs 1.00 Slabs	

2.00 Slabs

76 ASR

Pavement Database: IA 2024			Generate Date: 8/11/2025
Network ID: CNC			Page 10
Sample Number: 25			
Sample Type: R Sample PCI: 91 Sample Area (Slabs): 24.00 65 JT SEAL DMG	L	Comments: 24.00 Slabs	
71 FAULTING Sample Number: 35	L	2.00 Slabs	
Sample Type: R Sample PCI: 73 Sample Area (Slabs): 24.00	Sample	Comments:	
65 JT SEAL DMG 71 FAULTING 71 FAULTING	M L M	24.00 Slabs 2.00 Slabs 3.00 Slabs	
Sample Number: 45			
Sample Type: R Sample PCI: 60 Sample Area (Slabs): 24.00	Sample	Comments:	
65 JT SEAL DMG 71 FAULTING 71 FAULTING 74 JOINT SPALL	M L M M	24.00 Slabs 2.00 Slabs 6.00 Slabs 1.00 Slabs	
Sample Number: 52			
Sample Type: R Sample PCI: 63 Sample Area (Slabs): 24.00 63 LINEAR CR 63 LINEAR CR 65 JT SEAL DMG 71 FAULTING	Sample L M M L	2.00 Slabs 3.00 Slabs 24.00 Slabs 24.00 Slabs 2.00 Slabs	
Sample Number: 57			
Sample Type: R Sample PCI: 25 Sample Area (Slabs): 24.00	Sample	Comments:	
62 CORNER BREAK 63 LINEAR CR 66 SMALL PATCH 67 LARGE PATCH 71 FAULTING 71 FAULTING 72 SHAT. SLAB 74 JOINT SPALL	L M L L M M	2.00 Slabs 6.00 Slabs 1.00 Slabs 3.00 Slabs 2.00 Slabs 2.00 Slabs 3.00 Slabs 1.00 Slabs	

1.00 Slabs

75 CORNER SPALL

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 11

Network ID: CNC		Page 11	
	Branch - Secti	on ID: T01CH - 001	
Branch Name: TAXIWAY 01			Use: TAXIWAY
LCD: 5/1/2000 Surface Type: PCC Rank: P Section Area (sf): 8,180.00 Length (ft): 160.00 Width (ft): 51.00 From: APRON To: RUNWAY 17/35		PCI Family: IowaPCCTW_SC_Basic	
Slabs: 86 Slab Length (ft): 10.00 Slab Width (ft): 9.50 Joint Length (ft): 1,467.54		Section Comments:	
Last Insp Date: 3/27/2025 PCI: 88 Total Samples: 4 Surveyed: 4		Inspection Comments:	
Sample Number: 01			
Sample Type: R Sample PCI: 93 Sample Area (Slabs): 20.00		Sample Comments:	
65 JT SEAL DMG	M	20.00 Slabs	
Sample Number: 02			
Sample Type: R Sample PCI: 91 Sample Area (Slabs): 20.00		Sample Comments:	
65 JT SEAL DMG	M	20.00 Slabs	
74 JOINT SPALL	L	1.00 Slabs	
Sample Number: 03			
Sample Type: R Sample PCI: 93 Sample Area (Slabs): 20.00		Sample Comments:	
65 JT SEAL DMG	M	20.00 Slabs	
Sample Number: 04			
Sample Type: R Sample PCI: 78 Sample Area (Slabs): 27.00		Sample Comments:	
63 LINEAR CR	L	7.00 Slabs	

L

Ν

Μ

1.00 Slabs

1.00 Slabs

1.00 Slabs

67 LARGE PATCH

73 SHRINKAGE CR

74 JOINT SPALL

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 12

Network ID: CNC			Page 12	
Branch Name: TAXIWAY 01	Branch - Section	Branch - Section ID: T01CH - 002		
LCD: 6/1/1997 Surface Type: PCC Rank: P Section Area (sf): 8,728.00 Length (ft): 184.00 Width (ft): 40.00 From: SECTION 01 To: SOUTH END RUNWAY 17	PCI	Family: lowaPCCTW_SC_Basic	Use: TAXIWAY	
Slabs: 70 Slab Length (ft): 12.50 Slab Width (ft): 10.00 Joint Length (ft): 1,305.41 Last Insp Date: 3/27/2025 PCI: 75 Total Samples: 3		ion Comments: avg slabs ection Comments:		
Surveyed: 3				
Sample Number: 001				
Sample Type: R Sample PCI: 84 Sample Area (Slabs): 24.00	Sam	ple Comments:		
63 LINEAR CR 65 JT SEAL DMG 70 SCALING 73 SHRINKAGE CR	M M L N	1.00 Slabs 24.00 Slabs 1.00 Slabs 1.00 Slabs		
Sample Number: 002				
Sample Type: R Sample PCI: 84 Sample Area (Slabs): 24.00	Sam	ple Comments:		
65 JT SEAL DMG 74 JOINT SPALL 74 JOINT SPALL 76 ASR	M L M L	24.00 Slabs 1.00 Slabs 1.00 Slabs 1.00 Slabs		
Sample Number: 003				
Sample Type: R Sample PCI: 57 Sample Area (Slabs): 22.00	Sam	ple Comments:		
62 CORNER BREAK 65 JT SEAL DMG 71 FAULTING	L M L	1.00 Slabs 22.00 Slabs 3.00 Slabs		

M

Μ

5.00 Slabs

1.00 Slabs

71 FAULTING

74 JOINT SPALL

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 13

			95
Branch Name: TAXIWAY 02	Branch - Section ID: T02	2CH - 001	Use: TAXIWAY
LCD: 6/1/1996 Surface Type: PCC Rank: P Section Area (sf): 11,431.00 Length (ft): 300.00 Width (ft): 35.00 From: APRON 01 To: APRON 02	PCI Family: lo	owaPCCTW_SC_Basic	
Slabs: 120 Slab Length (ft): 10.50 Slab Width (ft): 8.80 Joint Length (ft): 1,961.89	Section Comr	ments:	
Last Insp Date: 3/27/2025 PCI: 71 Total Samples: 6 Surveyed: 5	Inspection Co	omments:	
Sample Number: 001			
Sample Type: A Sample PCI: 32 Sample Area (Slabs): 23.00	Sample Comi	ments:	
63 LINEAR CR 63 LINEAR CR 65 JT SEAL DMG 71 FAULTING 71 FAULTING 71 FAULTING 74 JOINT SPALL 75 CORNER SPALL 76 ASR 76 ASR	L M M H L M M M L	1.00 Slabs 1.00 Slabs 23.00 Slabs 3.00 Slabs 3.00 Slabs 1.00 Slabs 1.00 Slabs 1.00 Slabs 6.00 Slabs 2.00 Slabs	
Sample Number: 002			
Sample Type: R Sample PCI: 93 Sample Area (Slabs): 20.00	Sample Com		
65 JT SEAL DMG Sample Number: 003	M	20.00 Slabs	
Sample Type: R Sample PCI: 74 Sample Area (Slabs): 20.00	Sample Comi	ments:	
62 CORNER BREAK 63 LINEAR CR 65 JT SEAL DMG 76 ASR	M M M L	1.00 Slabs 1.00 Slabs 20.00 Slabs 3.00 Slabs	

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 14

Sample Number: 004

Sample Type: R Sample Comments:

Sample PCI: 75

Sample Area (Slabs): 20.00

510 7 11 0d (Glabo). 20:00		
63 LINEAR CR	L	1.00 Slabs
65 JT SEAL DMG	M	20.00 Slabs
71 FAULTING	L	1.00 Slabs
73 SHRINKAGE CR	N	1.00 Slabs
75 CORNER SPALL	L	1.00 Slabs
76 ASR	L	1.00 Slabs

Sample Number: 005

Sample Type: R Sample Comments:

Sample PCI: 76

Sample Area (Slabs): 20.00

62 CORNER BREAK	M	1.00 Slabs
65 JT SEAL DMG	M	20.00 Slabs
67 LARGE PATCH	L,	1.00 Slabs
75 CORNER SPALL	L,	1.00 Slabs
76 ASR	L	1.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 15

	Branch - Section ID: T	03CH - 001	
Branch Name: TAXIWAY 03			Use: TAXIWAY
LCD: 6/1/1996 Surface Type: PCC Rank: P Section Area (sf): 42,207.00 Length (ft): 1,130.00 Width (ft): 35.00 From: APRON 02 To: CENTER RUNWAY 10	PCI Famil	y: lowaPCCTW_SC_Basic	
Slabs: 480 Slab Length (ft): 10.00 Slab Width (ft): 8.80 Joint Length (ft): 7,773.68	Section Co	omments:	
Last Insp Date: 3/27/2025 PCI: 88 Total Samples: 24 Surveyed: 7	Inspection	Comments:	
Sample Number: 003			
Sample Type: R Sample PCI: 88 Sample Area (Slabs): 20.00	Sample Co	omments:	
65 JT SEAL DMG 76 ASR	M L	20.00 Slabs 1.00 Slabs	
Sample Number: 005			
Sample Type: R Sample PCI: 81 Sample Area (Slabs): 20.00	Sample Co	omments:	
65 JT SEAL DMG 76 ASR	M L	20.00 Slabs 6.00 Slabs	
Sample Number: 007			
Sample Type: R Sample PCI: 87	Sample Co	omments:	

Sample Area (Slabs): 20.00

65 JT SEAL DMG M 20.00 Slabs 76 ASR L 2.00 Slabs

Sample Number: 010

Sample Type: R Sample Comments:

Sample PCI: 88

Sample Area (Slabs): 20.00

 65 JT SEAL DMG
 M
 20.00 Slabs

 70 SCALING
 L
 1.00 Slabs

 74 JOINT SPALL
 M
 1.00 Slabs

Sample Number: 012

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (Slabs): 20.00

65 JT SEAL DMG M 20.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 16

Sample Number: 015

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (Slabs): 20.00

65 JT SEAL DMG M 20.00 Slabs

Sample Number: 020

Sample Type: R Sample Comments:

Sample PCI: 85

Sample Area (Slabs): 20.00

 65 JT SEAL DMG
 M
 20.00 Slabs

 71 FAULTING
 L
 1.00 Slabs

 74 JOINT SPALL
 M
 1.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 17

Network ID: CNC			Page 17
	Branch - Section ID:	T04CH - 001	
Branch Name: TAXIWAY 04			Use: TAXIWAY
LCD: 1/1/2017 Surface Type: PCC Rank: P Section Area (sf): 49,043.00 Length (ft): 1,210.00 Width (ft): 30.00 From: SECTION 02 To: WEST END RUNWAY 10	PCI Far	mily: IowaPCCTW_SC_Basic	
Slabs: 515 Slab Length (ft): 10.00 Slab Width (ft): 8.75 Joint Length (ft): 8,109.09	Section	Comments:	
Last Insp Date: 3/27/2025 PCI: 95 Total Samples: 16 Surveyed: 6	Inspecti	ion Comments:	
Sample Number: 002			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 26.00	Sample	Comments:	
65 JT SEAL DMG	L	26.00 Slabs	
Sample Number: 004			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 23.00 65 JT SEAL DMG	Sample L	Comments: 23.00 Slabs	
Sample Number: 007		20100 0.000	
Sample Type: R Sample PCI: 96 Sample Area (Slabs): 24.00	Sample	Comments:	
65 JT SEAL DMG 75 CORNER SPALL	L L	24.00 Slabs 1.00 Slabs	
Sample Number: 010			
Sample Type: R Sample PCI: 98 Sample Area (Slabs): 24.00	Sample	Comments:	
65 JT SEAL DMG	L	24.00 Slabs	

Sample Number: 013

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 24.00

65 JT SEAL DMG L 24.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 18

Sample Number: 015

Sample Type: R Sample Comments:

Sample PCI: 82

Sample Area (Slabs): 28.00

 65 JT SEAL DMG
 M
 28.00 Slabs

 71 FAULTING
 L
 4.00 Slabs

 75 CORNER SPALL
 L
 1.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 19

Branch - Section ID: TH01CH - 001

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

LCD: 1/1/1977 PCI Family: lowaPCCTH_SC

Surface Type: PCC

Rank: P

Section Area (sf): 7,531.00 Length (ft): 243.00

Width (ft): 31.00 From: SEE MAP To: SEE MAP

Slabs: 21 Section Comments: avg slabs

Slab Length (ft): 18.00 Slab Width (ft): 20.00 Joint Length (ft): 521.01

Last Insp Date: 3/27/2025 Inspection Comments:

PCI: 29 Total Samples: 1 Surveyed: 1

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 29

Sample Area (Slabs): 21.00

63 LINEAR CR	L	7.00 Slabs
63 LINEAR CR	M	9.00 Slabs
65 JT SEAL DMG	Н	21.00 Slabs
71 FAULTING	Н	1.00 Slabs
71 FAULTING	M	1.00 Slabs
73 SHRINKAGE CR	N	1.00 Slabs
75 CORNER SPALL	Н	2.00 Slabs
76 ASR	L	3.00 Slabs

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 20

Network ID. CINC			i age 20			
Branch Name: T-HANGAR 01	Branch - Section ID: T	H01CH - 002	Use: T-HANGAF			
LCD: 1/1/1977 Surface Type: PCC Rank: P Section Area (sf): 9,164.00 Length (ft): 436.00 Width (ft): 21.00 From: SEE MAP To: SEE MAP	PCI Fam	ily: IowaPCCTH_SC				
Slabs: 31 Slab Length (ft): 15.00 Slab Width (ft): 20.00 Joint Length (ft): 611.73	Section 0	Section Comments:				
Last Insp Date: 3/27/2025 PCI: 1 Total Samples: 2 Surveyed: 2	Inspectio	n Comments:				
Sample Number: 01						
Sample Type: R Sample PCI: 4 Sample Area (Slabs): 11.00	Sample (Comments:				
62 CORNER BREAK 63 LINEAR CR 63 LINEAR CR 65 JT SEAL DMG 72 SHAT. SLAB 72 SHAT. SLAB 74 JOINT SPALL 74 JOINT SPALL 75 CORNER SPALL 76 ASR	M H M H M M M	3.00 Slabs 2.00 Slabs 2.00 Slabs 11.00 Slabs 1.00 Slabs 2.00 Slabs 2.00 Slabs 1.00 Slabs 3.00 Slabs 1.00 Slabs 5.00 Slabs				
Sample Number: 02	_					
Sample Type: R Sample PCI: 0 Sample Area (Slabs): 20.00	Sample 0	Comments:				
61 BLOW-UP 61 BLOW-UP 63 LINEAR CR 65 JT SEAL DMG 70 SCALING 70 SCALING 72 SHAT. SLAB 72 SHAT. SLAB 74 JOINT SPALL 74 JOINT SPALL 76 ASR 76 ASR	H M M H M H M H	1.00 Slabs 1.00 Slabs 8.00 Slabs 20.00 Slabs 1.00 Slabs 2.00 Slabs 2.00 Slabs 2.00 Slabs 5.00 Slabs 5.00 Slabs 3.00 Slabs 4.00 Slabs 3.00 Slabs				
70.400	_	4.00.01.1				

4.00 Slabs

76 ASR

Pavement Database: IA 2024 Generate Date: 8/11/2025

Network ID: CNC Page 21

Branch - Section ID: TH01CH - 003

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

LCD: 1/1/1977 Surface Type: PCC

Rank: P

Section Area (sf): 5,500.00

Length (ft): 275.00 Width (ft): 20.00 From: SEE MAP To: SEE MAP

Slabs: 18 Section Comments:

Slab Length (ft): 15.00 Slab Width (ft): 20.00 Joint Length (ft): 346.67

Last Insp Date: 3/27/2025

PCI: 25 Total Samples: 1 Surveyed: 1

Inspection Comments:

PCI Family: IowaPCCTH SC

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 25

Sample Area (Slabs): 18.00

 63 LINEAR CR
 M
 17.00 Slabs

 65 JT SEAL DMG
 H
 18.00 Slabs

 72 SHAT. SLAB
 M
 1.00 Slabs

 76 ASR
 L
 8.00 Slabs

APPENDIX D WORK HISTORY REPORT

Pavement Database: IA 2024 Generate Date: 6/30/2025

Network ID: CNC Page 1

Network: CHARITON MUNICIPAL AIRPORT

Branch - Section ID: A01CH - 001

 LCD: 5/1/2000
 Length (ft):
 290.00

 Use: APRON
 Width (ft):
 100.00

 Rank: P
 True Area (sf):
 30,018.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2019	CS-PC	Crack Sealing - PCC	\$0.00	0.00	False	Route and seal cracks
06-01-2019	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
01-01-2016	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	FIELD EST.
05-01-2000	NC-PC	New Construction - PCC	\$0.00	0.00	True	-
06-01-1977	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Branch - Section ID: A02CH - 001

 LCD: 6/1/1996
 Length (ft):
 250.00

 Use: APRON
 Width (ft):
 120.00

 Rank: P
 True Area (sf):
 30,600.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2018	PA-PF	Patching - PCC Full Depth	\$0.00	0.00	False	-
06-01-2018	PA-PP	Patching - PCC Partial Depth	\$0.00	0.00	False	-
06-01-2018	CS-PC	Crack Sealing - PCC	\$0.00	0.00	False	Route and seal cracks
06-01-2018	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
06-01-2007	SL-PC	Slab Replacement - PCC	\$0.00	0.00	False	-
06-01-1996	NC-IN	New Construction - Initial	\$0.00	0.00	True	-

Branch - Section ID: A02CH - 002

 LCD: 6/3/2024
 Length (ft):
 120.00

 Use: APRON
 Width (ft):
 80.00

 Rank: P
 True Area (sf):
 7,583.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-03-2024	NC-PC	New Construction - PCC	\$8.00	6.00	True	6" P-501 PCC
06-02-2024	SB-AG	Subbase - Aggregate	\$0.00	6.00	False	6" P-209 GRANULAR SUBBASE COURSE
06-01-2024	SG-ST	Subgrade - Stabilized	\$0.00	16.00	False	16" P-156 CEMENT TREATED SUBGRADE WITH P-209 GEOTEXTILE FABRIC

Branch - Section ID: R10CH - 001

 LCD: 6/1/1996
 Length (ft):
 4,000.00

 Use: RUNWAY
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 302,631.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2018	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
06-01-2018	CS-PC	Crack Sealing - PCC	\$0.00	0.00	False	Route and seal cracks
06-01-2018	SL-PC	Slab Replacement - PCC	\$0.00	5.00	False	-
06-01-2018	PA-PF	Patching - PCC Full Depth	\$0.00	0.00	False	-
06-01-2018	PA-PP	Patching - PCC Partial Depth	\$0.00	0.00	False	-
06-01-1996	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Pavement Database: IA 2024 Generate Date: 6/30/2025

Network ID: CNC Page 2

Branch - Section ID: R10CH - 002

 LCD: 7/1/2018
 Length (ft):
 477.00

 Use: RUNWAY
 Width (ft):
 12.50

 Rank: P
 True Area (sf):
 5,962.50

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
07-01-2018	CR-PC	Complete Reconstruction - PCC	\$0.00	5.00	True	5" P-501 PCC, SLAB REPLACEMENTS
06-01-1996	NC-PC	New Construction - PCC	\$0.00	0.00	True	-

Branch - Section ID: R17CH - 001

 LCD: 6/2/1997
 Length (ft):
 2,800.00

 Use: RUNWAY
 Width (ft):
 75.00

 Rank: S
 True Area (sf):
 215,253.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2019	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
06-01-2019	SL-PC	Slab Replacement - PCC	\$0.00	0.00	False	-
06-01-2019	PA-PF	Patching - PCC Full Depth	\$0.00	0.00	False	-
06-01-2019	CS-PC	Crack Sealing - PCC	\$0.00	0.00	False	Route and seal cracks
06-01-2019	PA-PP	Patching - PCC Partial Depth	\$0.00	0.00	False	-
06-01-2007	SL-PC	Slab Replacement - PCC	\$0.00	0.00	False	-
06-02-1997	CR-PC	Complete Reconstruction - PCC	\$0.00	5.00	True	5" P501 PCC
06-01-1997	SG-ST	Subgrade - Stabilized	\$0.00	12.00	False	12" P158 FLY-ASH TREATED SOIL AGGREGATE SUBGRADE
06-04-1964	NC-AC	New Construction - AC	\$0.00	3.00	True	3" P401 AC
06-03-1964	ST-SC	Surface Treatment - Seal Coat	\$0.00	0.50	False	0.5" DOUBLE SEAL COAT
06-03-1964	BA-AG	Base Course - Aggregate	\$0.00	6.00	False	6" P209 CABC
06-02-1964	SB-AG	Subbase - Aggregate	\$0.00	4.00	False	4" P154 SUBBASE
06-01-1964	SG-CO	Subgrade - Compacted	\$0.00	0.00	False	P152

Branch - Section ID: T01CH - 001

 LCD: 5/1/2000
 Length (ft):
 160.00

 Use: TAXIWAY
 Width (ft):
 51.00

 Rank: P
 True Area (sf):
 8,180.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2019	SL-PC	Slab Replacement - PCC	\$0.00	0.00	False	-
06-01-2019	CS-PC	Crack Sealing - PCC	\$0.00	0.00	False	Route and seal cracks
06-01-2019	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
01-01-2016	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	FIELD EST.
05-01-2000	NC-PC	New Construction - PCC	\$0.00	0.00	True	-
06-01-1977	NC-AC	New Construction - AC	\$0.00	0.00	True	-

Pavement Database: IA 2024 Generate Date: 6/30/2025

Network ID: CNC Page 3

Branch - Section ID: T01CH - 002

 LCD: 6/1/1997
 Length (ft):
 184.00

 Use: TAXIWAY
 Width (ft):
 40.00

 Rank: P
 True Area (sf):
 8,728.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2019	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
01-01-2014	CS-PC	Crack Sealing - PCC	\$0.00	0.00	False	FIELD EST.
06-01-1997	NC-IN	New Construction - Initial	\$0.00	0.00	True	-

Branch - Section ID: T02CH - 001

 LCD: 6/1/1996
 Length (ft):
 300.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 11,431.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2018	PA-PP	Patching - PCC Partial Depth	\$0.00	0.00	False	-
06-01-2018	SL-PC	Slab Replacement - PCC	\$0.00	5.00	False	-
06-01-2018	PA-PF	Patching - PCC Full Depth	\$0.00	0.00	False	-
06-01-2018	CS-PC	Crack Sealing - PCC	\$0.00	0.00	False	Route and seal cracks
06-01-2018	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
06-01-1996	NC-IN	New Construction - Initial	\$0.00	0.00	True	-

Branch - Section ID: T03CH - 001

 LCD: 6/1/1996
 Length (ft):
 1,130.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 42,207.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
06-01-2018	JS-LC	Joint Seal (Localized)	\$0.00	0.00	False	-
06-01-2007	SL-PC	Slab Replacement - PCC	\$0.00	0.00	False	-
06-01-1996	NC-IN	New Construction - Initial	\$0.00	0.00	True	-

Branch - Section ID: T04CH - 001

 LCD: 1/1/2017
 Length (ft):
 1,210.00

 Use: TAXIWAY
 Width (ft):
 30.00

 Rank: P
 True Area (sf):
 49,043.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-2017	CR-PC	Complete Reconstruction - PCC	\$0.00	0.00	True	FIELD EST.
06-01-1997	NC-IN	New Construction - Initial	\$0.00	0.00	True	-

Pavement Database: IA 2024 Generate Date: 6/30/2025

Network ID: CNC Page 4

Branch - Section ID: TH01CH - 001

 LCD: 1/1/1977
 Length (ft):
 243.00

 Use: T-HANGAR
 Width (ft):
 31.00

 Rank: P
 True Area (sf):
 7,531.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-1977	NC-PC	New Construction - PCC	\$0.00	0.00	True	UNKNOWN CONST. DATE

Branch - Section ID: TH01CH - 002

 LCD: 1/1/1977
 Length (ft):
 436.00

 Use: T-HANGAR
 Width (ft):
 21.00

 Rank: P
 True Area (sf):
 9,164.00

Surface: PCC

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-1977	NC-PC	New Construction - PCC	\$0.00	0.00	True	UNKNOWN CONST. DATE

Branch - Section ID: TH01CH - 003

 LCD: 1/1/1977
 Length (ft):
 275.00

 Use: T-HANGAR
 Width (ft):
 20.00

 Rank: P
 True Area (sf):
 5,500.00

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major MR	Comments
01-01-1977	NC-PC	New Construction - PCC	\$0.00	0.00	True	UNKNOWN CONST. DATE

APPENDIX E

LOCALIZED PREVENTIVE MAINTENANCE POLICIES AND UNIT COST TABLES

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

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

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

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

Table E-3. 2025 unit costs for localized preventive maintenance actions.

Maintenance Action	Unit Cost
Asphalt Patch—Asphalt-Surfaced Pavement	\$15.90/sf
Crack Sealing—Asphalt-Surfaced Pavement	\$2.72/If
Partial Depth PCC Patch—PCC Pavement	\$40.74/sf
Full Depth PCC Patch—PCC Pavement	\$18.19/sf
Crack Sealing—PCC Pavement	\$3.27/If
Joint Sealing—PCC Pavement	\$3.27/If
Grinding—PCC Pavement	\$0.39/sf
Slab Replacement—PCC Pavement	\$18.19/sf

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

Table E-4. 2025 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
Asphalt- surfaced	\$11.29	\$5.34	\$5.34	\$5.34	\$0.00	\$0.00	\$0.00
PCC	\$18.86	\$8.92	\$8.92	\$8.92	\$0.00	\$0.00	\$0.00

Table Notes:

- The unit cost estimates are based on broad statewide numbers and should be adjusted to reflect local costs.
- Pavement Type: Asphalt-surfaced = AC (asphalt cement concrete), AAC (asphalt overlay on AC), or APC (asphalt overlay on PCC); PCC = portland cement concrete

APPENDIX F

YEAR 2025 LOCALIZED PREVENTIVE MAINTENANCE DETAILS

Year 2025 Localized Preventive Maintenance Details

Table F-1. Year 2025 localized preventive maintenance details.

Branch	Section	Distress Type	Severity	Distress Quantity	Distress Unit	Maintenance Action	Unit Cost	2025 Estimated Cost
A01CH	01	Corner Break	Low	2	Slabs	Crack Sealing - PCC	\$3.27	\$54
A01CH	01	Corner Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	\$40.74	\$219
A01CH	01	Joint Seal Damage	Medium	259	Slabs	Joint Seal (Localized)	\$3.27	\$15,799
A01CH	01	Joint Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	\$40.74	\$526
A01CH	01	LTD Cracking	Medium	1	Slabs	Crack Sealing - PCC	\$3.27	\$33
A01CH	01	Shattered Slab	Low	1	Slabs	Crack Sealing - PCC	\$3.27	\$65
A02CH	01	ASR	Medium	2	Slabs	Slab Replacement - PCC	\$18.19	\$3,479
A02CH	01	Corner Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	\$40.74	\$210
A02CH	01	Faulting	Medium	4	Slabs	Grinding (Localized)	\$0.39	\$15
A02CH	01	Joint Seal Damage	Medium	306	Slabs	Joint Seal (Localized)	\$3.27	\$18,778
A02CH	01	Joint Spalling	Medium	4	Slabs	Patching - PCC Partial Depth	\$40.74	\$1,006
A02CH	01	Joint Spalling	High	2	Slabs	Patching - PCC Partial Depth	\$40.74	\$629
A02CH	01	Small Patch	High	2	Slabs	Patching - PCC Full Depth	\$18.19	\$94
R10CH	01	Corner Break	Low	9	Slabs	Crack Sealing - PCC	\$3.27	\$247
R10CH	01	Corner Spalling	Medium	9	Slabs	Patching - PCC Partial Depth	\$40.74	\$1,009
R10CH	01	Corner Spalling	High	9	Slabs	Patching - PCC Partial Depth	\$40.74	\$1,009
R10CH	01	Joint Seal Damage	Medium	2,374	Slabs	Joint Seal (Localized)	\$3.27	\$162,745
R10CH	01	Large Patch	High	18	Slabs	Patching - PCC Full Depth	\$18.19	\$20,593
R10CH	01	LTD Cracking	Medium	18	Slabs	Crack Sealing - PCC	\$3.27	\$683
T01CH	01	Joint Seal Damage	Medium	59	Slabs	Joint Seal (Localized)	\$3.27	\$3,310
T01CH	01	Joint Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	\$40.74	\$260
T01CH	02	Corner Break	Low	1	Slabs	Crack Sealing - PCC	\$3.27	\$27

Year 2025 Localized Preventive Maintenance Details

Table F-1. Year 2025 localized preventive maintenance details (continued).

Branch	Section	Distress Type	Severity	Distress Quantity	Distress Unit	Maintenance Action	Unit Cost	2025 Estimated Cost
T01CH	02	Faulting	Medium	5	Slabs	Grinding (Localized)	\$0.39	\$20
T01CH	02	Joint Seal Damage	Medium	70	Slabs	Joint Seal (Localized)	\$3.27	\$4,269
T01CH	02	Joint Spalling	Medium	2	Slabs	Patching - PCC Partial Depth	\$40.74	\$526
T01CH	02	LTD Cracking	Medium	1	Slabs	Crack Sealing - PCC	\$3.27	\$37
T02CH	01	ASR	Medium	2	Slabs	Slab Replacement - PCC	\$18.19	\$3,362
T02CH	01	Corner Break	Medium	2	Slabs	Patching - PCC Full Depth	\$18.19	\$1,424
T02CH	01	Corner Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	\$40.74	\$110
T02CH	01	Faulting	Medium	1	Slabs	Grinding (Localized)	\$0.39	\$3
T02CH	01	Faulting	High	3	Slabs	Slab Replacement - PCC	\$18.19	\$5,042
T02CH	01	Joint Seal Damage	Medium	120	Slabs	Joint Seal (Localized)	\$3.27	\$6,415
T02CH	01	Joint Spalling	Medium	1	Slabs	Patching - PCC Partial Depth	\$40.74	\$263
T02CH	01	LTD Cracking	Medium	2	Slabs	Crack Sealing - PCC	\$3.27	\$70
T03CH	01	Joint Seal Damage	Medium	480	Slabs	Joint Seal (Localized)	\$3.27	\$25,420
T03CH	01	Joint Spalling	Medium	7	Slabs	Patching - PCC Partial Depth	\$40.74	\$1,804
T04CH	01	Joint Seal Damage	Medium	97	Slabs	Joint Seal (Localized)	\$3.27	\$4,983

Table Notes:

- 1. See Figure 3 for the location of the branch and section.
- 2. Distress types are defined by ASTM D5340. 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 adjustments to reflect specific conditions at Chariton Municipal Airport.



PREPARED FOR

Iowa Department of Transportation Modal Transportation Bureau 800 Lincoln Way Ames, Iowa 50010 515-239-1691 https://iowadot.gov/modes-travel/aviation

AUGUST 2025