Pella Municipal Airport

Pavement Management Report



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PELLA MUNICIPAL AIRPORT PAVEMENT MANAGEMENT REPORT

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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 Pella 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.

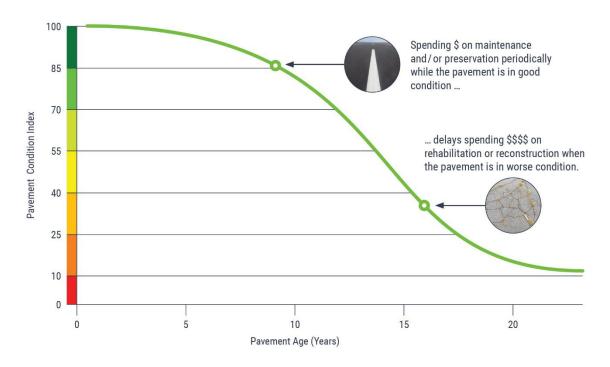


Figure 1. Pavement condition versus cost of repair.

Introduction August 2025

The pavement evaluation results for Pella Municipal Airport are presented within this report and can be used by Pella 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 <u>Iowa DOT's website</u> or directly (<u>Iowa APMS IDEA</u>).

Pavement Inventory August 2025

PAVEMENT INVENTORY

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

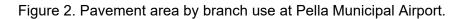
The pavement network at Pella Municipal Airport was then divided into branches, sections, and sample units. A branch is a single entity that serves a distinct function. For example, a runway is considered a branch because it serves a single function (allowing aircraft to take off and land). Taxiways,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

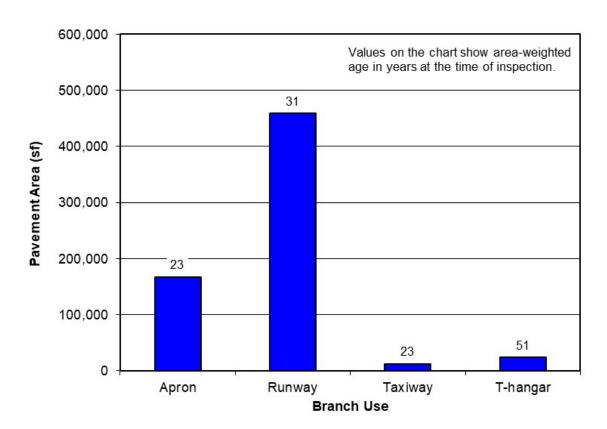
Each branch was further divided into sections. Traditionally, sections are defined as parts of the branch that share common attributes, such as cross section, date of last construction, traffic level, and performance. Using this approach, if a runway was built in 1968 and then extended in 1984, it would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

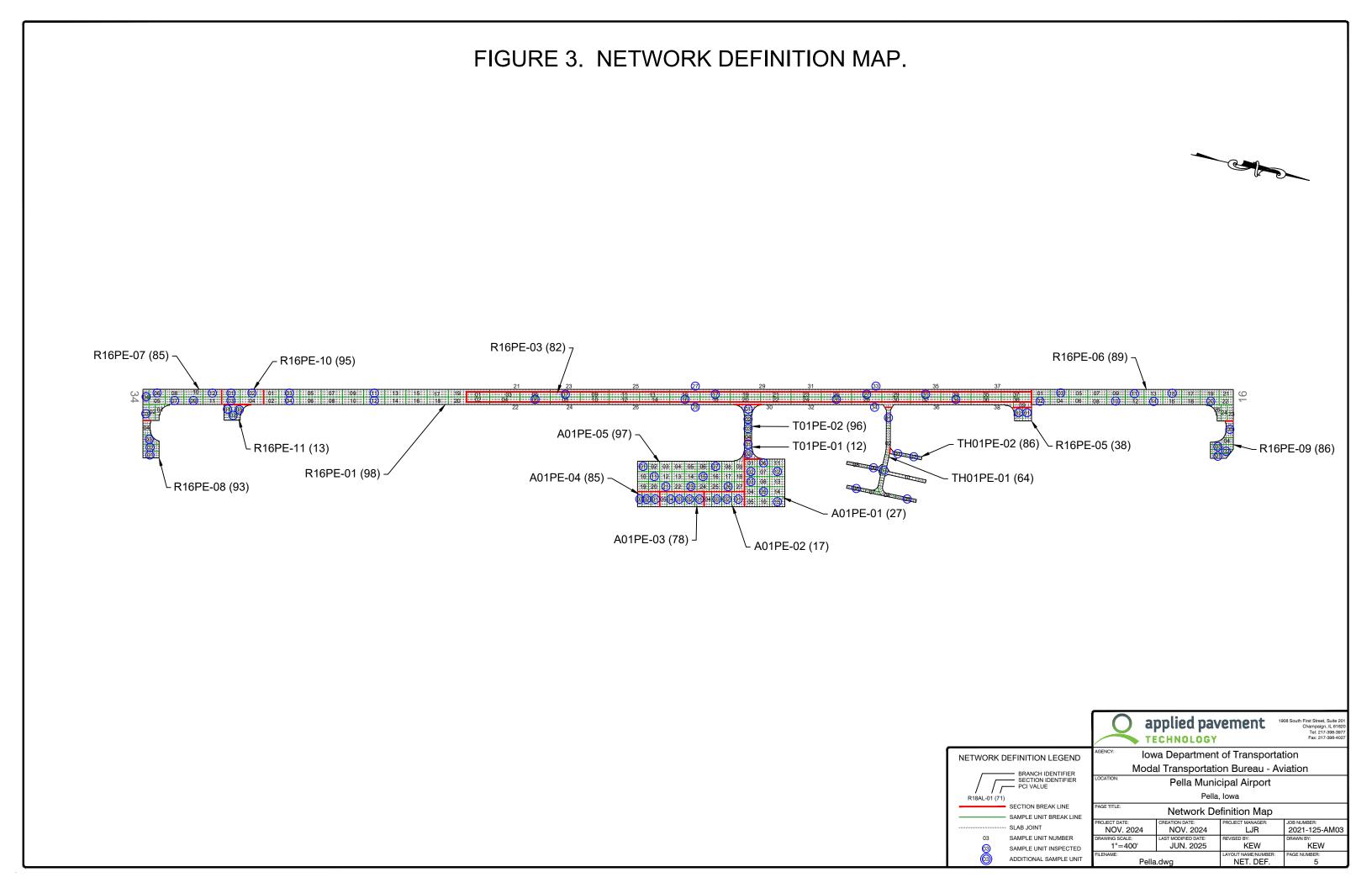
To estimate the overall condition of a pavement section, each section was subdivided into sample units. Portions of these sample units were evaluated during the pavement inspection, and the collected information was extrapolated to predict the overall section condition and quantities of distress.

Approximately 661,000 square feet of pavement were evaluated at Pella 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 Pella Municipal Airport.

Pavement Inventory August 2025







PAVEMENT EVALUATION

Pavement Evaluation Procedure

APTech visually inspected the pavements at Pella Municipal 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, 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 Pella 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 Repair

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 Pella Municipal Airport were inspected in March 2025. The 2025 area-weighted condition of Pella Municipal Airport is 82, with conditions ranging from 12 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 85.

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



Figure 6. Pavement area by PCI range at Pella Municipal Airport.

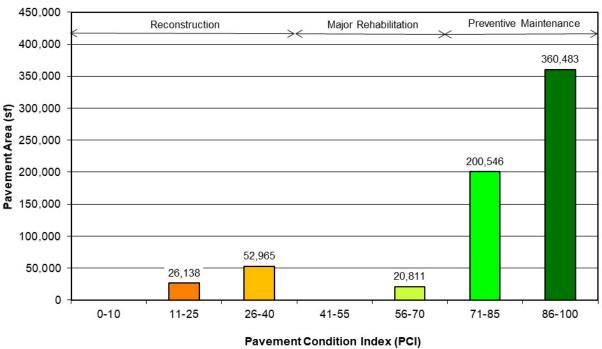
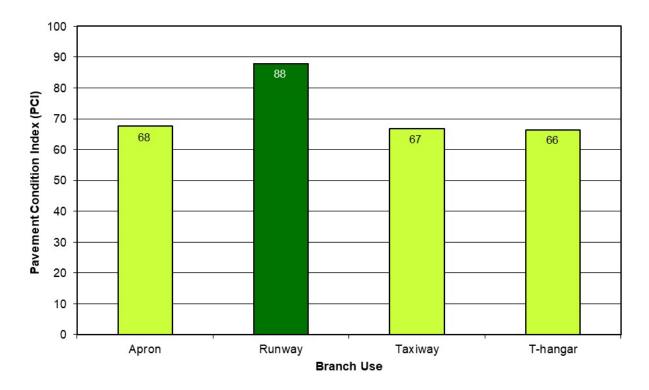
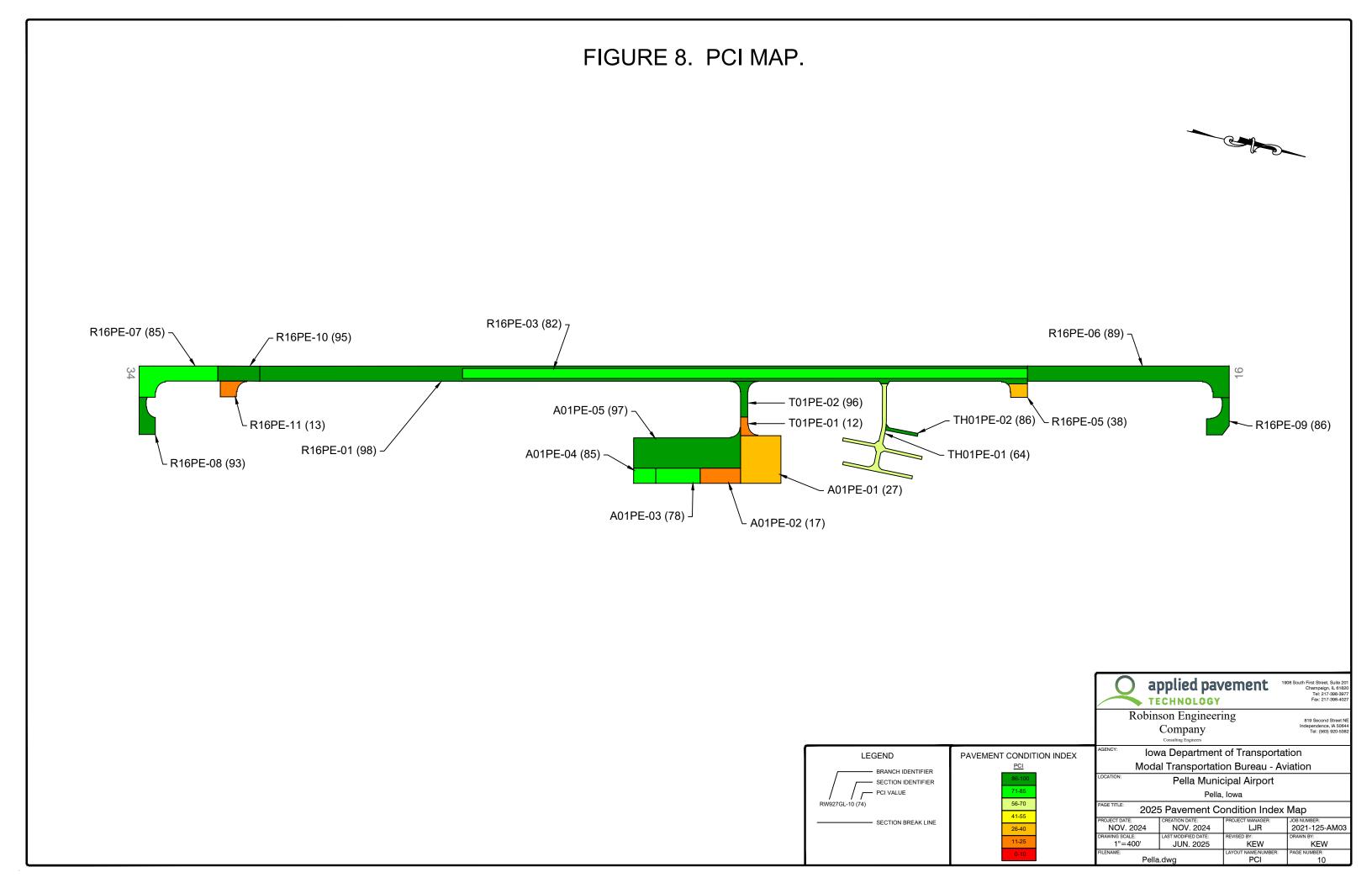


Figure 7. Area-weighted PCI by branch use at Pella Municipal Airport.

(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 | |
|--------|---------|-----------------|----------------------|------------|-------------|------------------------------|---------------------------------------|-------------------------------|---|--|
| A01PE | 01 | PCC | 47,200 | 6/3/1969 | 27 | 5 | 10 | 85 | ASR, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Popouts, Small Patch | |
| A01PE | 02 | PCC | 15,000 | 1/1/2000 | 17 | 0 | 10 | 90 | ASR, Joint Seal Damage, Large Patch, Small Patch | |
| A01PE | 03 | PCC | 16,500 | 1/1/2000 | 78 | 26 | 41 | 33 | Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking | |
| A01PE | 04 | PCC | 8,230 | 1/1/2000 | 85 | 0 | 77 | 23 | Corner Spalling, Joint Spalling, Joint Seal Damage, Small Patch | |
| A01PE | 05 | PCC | 80,309 | 7/3/2023 | 97 | 36 | 64 | 0 | Corner Break, Joint Seal Damage | |
| R16PE | 01 | PCC | 148,196 | 11/3/2020 | 98 | 0 | 100 | 0 | Joint Seal Damage | |
| R16PE | 03 | PCC | 139,475 | 10/2/1969 | 82 | 29 | 8 | 63 | ASR, Corner Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Shrinkage Cracking, Small Patch | |
| R16PE | 05 | PCC | 5,765 | 6/1/1989 | 38 | 11 | 13 | 76 | ASR, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch | |
| R16PE | 06 | PCC | 82,427 | 6/1/1989 | 89 | 6 | 47 | 47 | Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch | |
| R16PE | 07 | PCC | 36,341 | 6/1/1989 | 85 | 11 | 38 | 51 | ASR, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, Large Patch, LTD Cracking, Small Patch | |
| R16PE | 08 | PCC | 10,953 | 10/10/2004 | 93 | 0 | 100 | 0 | Joint Seal Damage | |
| R16PE | 09 | PCC | 12,832 | 10/10/2004 | 86 | 0 | 85 | 15 | Faulting, Joint Spalling, Joint Seal Damage | |
| R16PE | 10 | PCC | 15,600 | 10/1/2011 | 95 | 0 | 91 | 9 | Joint Seal Damage, Large Patch | |
| R16PE | 11 | PCC | 7,089 | 10/2/1989 | 13 | 0 | 9 | 91 | ASR, Joint Seal Damage, Large Patch | |

Pavement Evaluation

Table 1. 2025 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 |
|--------|---------|-----------------|----------------------|-----------|-------------|------------------------------|--|-------------------------------|---|
| T01PE | 01 | PCC | 4,049 | 6/1/1969 | 12 | 10 | 6 | 84 | ASR, Corner Break, Joint Seal Damage, Large Patch, LTD Cracking, Popouts, Small Patch |
| T01PE | 02 | PCC | 7,625 | 11/3/2020 | 96 | 0 | 51 | 49 | ASR, Joint Seal Damage |
| TH01PE | 01 | PCC | 20,811 | 1/1/1969 | 64 | 50 | 19 | 31 | ASR, Corner Break, Corner Spalling, Faulting, Joint Spalling, Joint Seal Damage, LTD Cracking, Shattered Slab, Small Patch |
| TH01PE | 02 | PCC | 2,541 | 6/10/2017 | 86 | 0 | 78 | 22 | Corner Spalling, Joint Seal Damage |

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.
- 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

Pella Municipal Airport was inspected on March 12, 2025. There were 18 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.

Runway

Runway 16/34 consisted of nine sections. Section 01 was in Excellent condition with only lowseverity joint seal damage identified throughout. Various distresses were recorded in Section 03, including low-severity ASR, small patching, and joint seal damage; high-severity corner spalling; low- and medium-severity large patching and longitudinal, transverse, diagonal (LTD) cracking; and shrinkage cracking. Section 05 was in Poor condition with substantial amounts of low- and medium-severity ASR recorded along with high-severity joint seal damage, lowseverity large patching and small patching, and low- and medium-severity LTD cracking. Lowand medium-severity joint seal damage and low-severity corner spalling, joint spalling, faulting, large patching, LTD cracking, and small patching were identified in Section 06. In Section 07, low-severity ASR, faulting, and joint spalling; medium-severity corner spalling and LTD cracking; and low- and medium-severity large patching, small patching, and joint seal damage were recorded. Only medium-severity joint seal damage was observed throughout Section 08. Lowseverity faulting, high-severity joint seal damage, and medium-severity joint spalling were identified in Section 09. Section 10 was in Excellent condition and contained low- and mediumseverity joint seal damage and low-severity large patching. Section 11 was in *Poor* condition with all severities of ASR, high-severity joint seal damage, and low-severity large patching recorded at the time of the inspection.

Taxiway

The taxiway contained two sections. Section 01 was in *Poor* condition with various distresses recorded that included all severities of ASR, low-severity corner break and large patching, high-severity joint seal damage, medium-severity LTD cracking, popouts, and low- and medium-severity small patching. In Section 02, low-severity ASR and joint seal damage were recorded.

Apron

The apron area consisted of five sections. Sections 01 and 02 were both in *Poor* condition. All severities of ASR, high-severity joint seal damage, medium-severity joint spalling and LTD cracking, low-severity large patching and small patching, and popouts were identified in Section 01. Distresses noted in Section 02 included all severities of ASR, high-severity joint seal damage, and low- and medium-severity large patching and small patching. Low- and medium-severity corner spalling, low-severity faulting and large patching, high-severity joint seal damage, low- and high-severity joint spalling, and medium-severity LTD cracking were identified in Section 03. In Section 04, medium-severity corner spalling and joint spalling, high-severity joint seal damage, and low-severity small patching were observed during the inspection. Section 05 was recently constructed and was in *Excellent* condition with low-severity joint seal damage noted throughout along with small amounts of low-severity corner break.

T-Hangar

The T-hangar area was defined by two sections. Section 01 consisted of most of the T-hangar area with multiple distresses recorded. These distresses include medium-severity ASR and shattered slab, medium- and high-severity corner break, all severities of corner spalling, low-

severity faulting, high-severity joint seal damage and small patching, and low- and medium-severity joint spalling and LTD cracking. High-severity corner spalling and joint seal damage were observed in Section 02.

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 Pella 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 Pella 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 Pella 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 Pella 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 | A01PE | 01 | PCC | Major Rehabilitation | \$890,204 |
| 2025 | A01PE | 02 | PCC | Major Rehabilitation | \$282,904 |
| 2025 | A01PE | 03 | PCC | Preventive Maintenance | \$8,587 |
| 2025 | A01PE | 04 | PCC | Preventive Maintenance | \$4,391 |
| 2025 | A01PE | 05 | PCC | Preventive Maintenance | \$205 |
| 2025 | R16PE | 03 | PCC | Preventive Maintenance | \$6,549 |
| 2025 | R16PE | 05 | PCC | Major Rehabilitation | \$108,729 |
| 2025 | R16PE | 06 | PCC | Preventive Maintenance | \$5,792 |
| 2025 | R16PE | 07 | PCC | Preventive Maintenance | \$10,788 |
| 2025 | R16PE | 08 | PCC | Preventive Maintenance | \$5,698 |
| 2025 | R16PE | 09 | PCC | Preventive Maintenance | \$7,371 |
| 2025 | R16PE | 10 | PCC | Preventive Maintenance | \$2,201 |
| 2025 | R16PE | 11 | PCC | Major Rehabilitation | \$133,700 |
| 2025 | T01PE | 01 | PCC | Major Rehabilitation | \$76,365 |
| 2025 | TH01PE | 01 | PCC | Preventive Maintenance | \$31,765 |
| 2025 | TH01PE | 02 | PCC | Preventive Maintenance | \$1,340 |
| 2028 | TH01PE | 01 | PCC | Major Rehabilitation | \$198,740 |

Total Estimated Cost: \$1,775,000

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 Pella Municipal Airport.

The recommendations made in this report are based on a broad network-level analysis and meant to provide Pella 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 Pella 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, Pella 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.
- 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 Pella 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, Pella 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 Pella 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 Pella 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 Pella 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

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 |
|--------|---------|---|-----------------------|-------------------|------|-------------------|
| A01PE | 01 | | | | | |
| A01PE | 02 | | | | | |
| A01PE | 03 | | | | | |
| A01PE | 04 | | | | | |
| A01PE | 05 | | | | | |
| R16PE | 01 | | | | | |

Pavement Maintenance and Rehabilitation Program

| Table 3. Pavement inspection report (continued | 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 |
|--------|---------|---|-----------------------|-------------------|------|-------------------|
| R16PE | 03 | | | | | |
| R16PE | 05 | | | | | |
| R16PE | 06 | | | | | |
| R16PE | 07 | | | | | |
| R16PE | 08 | | | | | |
| R16PE | 09 | | | | | |

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 |
|--------|---------|---|-----------------------|-------------------|------|-------------------|
| R16PE | 10 | | | | | |
| R16PE | 11 | | | | | |
| T01PE | 01 | | | | | |
| T01PE | 02 | | | | | |
| TH01PE | 01 | | | | | |
| TH01PE | 02 | | | | | |

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 Pella Municipal Airport. A visual inspection of the pavements in 2025 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 Pella Municipal Airport, which revealed that approximately \$1,775,000 needs to be expended on M&R. Pella 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

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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

A01PE-01. ASR (Sample Unit No. 09).



A01PE-01. ASR (Sample Unit No. 15).



A01PE-01. Small Patching (Sample Unit No. 09).



A01PE-02. Overview.



A01PE-02. ASR (Sample Unit No. 01).



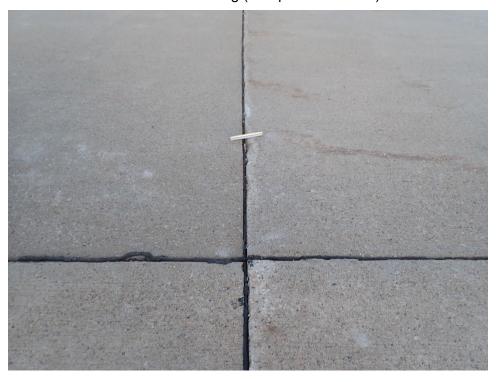
A01PE-02. Large Patching (Sample Unit No. 01).



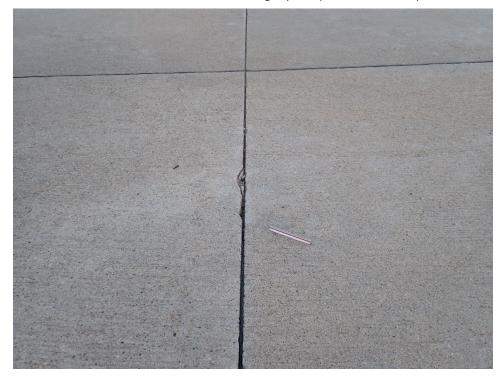
A01PE-03. Overview.



A01PE-03. Faulting (Sample Unit No. 03).



A01PE-03. Joint Seal Damage (Sample Unit No. 03).



A01PE-03. Joint Spalling (Sample Unit No. 03).



A01PE-04. Overview.



A01PE-04. Joint Seal Damage (Sample Unit No. 02).



A01PE-05. Overview.



A01PE-05. Corner Break (Sample Unit No. 07).



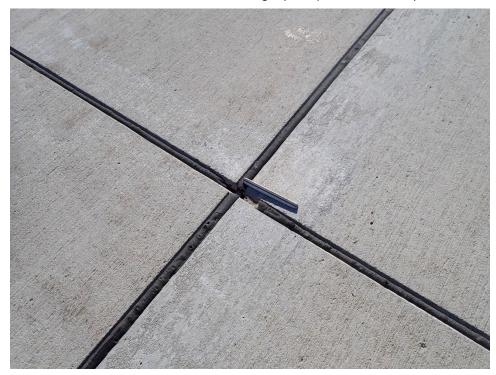
A01PE-05. Joint Seal Damage (Sample Unit No. 01).



R16PE-01. Overview.



R16PE-01. Joint Seal Damage (Sample Unit No. 12).



R16PE-03. Overview.



R16PE-03. LTD Cracking (Sample Unit No. 31).



R16PE-03. Large Patching (Sample Unit No. 31).



R16PE-05. Overview.



R16PE-05. ASR (Sample Unit No. 01) (1).



R16PE-05. ASR (Sample Unit No. 01) (2).



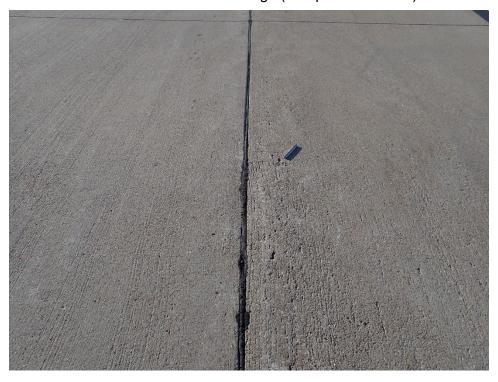
R16PE-05. Large Patching (Sample Unit No. 01).



R16PE-06. Overview.



R16PE-06. Joint Seal Damage (Sample Unit No. 20).



R16PE-06. Large Patching (Sample Unit No. 20).



R16PE-07. Overview.



R16PE-07. Corner Spalling (Sample Unit No. 04).



R16PE-07. Large Patching (Sample Unit No. 04).



R16PE-08. Overview.



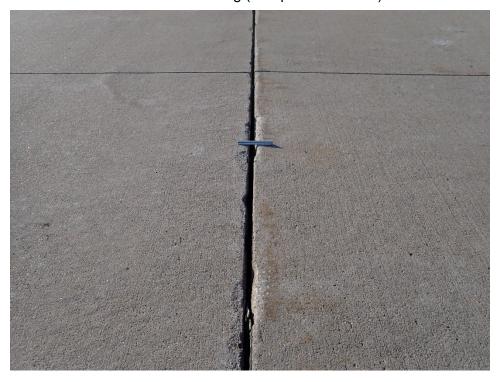
R16PE-08. Joint Seal Damage (Sample Unit No. 01).



R16PE-09. Overview.



R16PE-09. Faulting (Sample Unit No. 05).



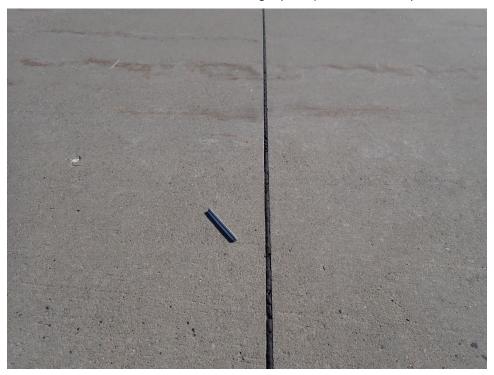
R16PE-09. Joint Seal Damage (Sample Unit No. 05).



R16PE-10. Overview.



R16PE-10. Joint Seal Damage (Sample Unit No. 02).



R16PE-10. Large Patching (Sample Unit No. 02).



R16PE-11. Overview.



R16PE-11. ASR (Sample Unit No. 03).



R16PE-11. Large Patching (Sample Unit No. 03).



T01PE-01. Overview.



T01PE-01. ASR (Sample Unit No. 01).



T01PE-02. Overview.



T01PE-02. ASR (Sample Unit No. 01).



T01PE-02. Joint Seal Damage (Sample Unit No. 01).



TH01PE-01. Overview.



TH01PE-01. Corner Break (Sample Unit No. 09).



TH01PE-01. Joint Seal Damage (Sample Unit No. 01).



TH01PE-01. Joint Seal Damage (Sample Unit No. 05).



TH01PE-01. Shattered Slab (Sample Unit No. 06).



TH01PE-02. Overview.



TH01PE-02. Corner Spalling (Sample Unit No. 02).



TH01PE-02. Joint Seal Damage (Sample Unit No. 01).



APPENDIX C INSPECTION REPORT

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

Network ID: PEA Page 1

| | | | . ago . |
|---|------------------------|--|------------|
| Branch Name: APRON | Branch - Section ID: A | 01PE - 001 | Use: APRON |
| LCD: 6/3/1969 Surface Type: PCC Rank: P Section Area (sf): 47,200.00 Length (ft): 200.00 Width (ft): 236.00 From: HANGER To: TAXIWAY 01 | PCI Family | : lowaPCCAP_SE_General | |
| Slabs: 286 Slab Length (ft): 13.30 Slab Width (ft): 12.40 Joint Length (ft): 6,919.32 | Section Co | mments: | |
| Last Insp Date: 3/12/2025 PCI: 27 Total Samples: 15 Surveyed: 6 | Inspection | Comments: | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 30 Sample Area (Slabs): 20.00 | Sample Co | mments: | |
| 63 LINEAR CR 65 JT SEAL DMG 66 SMALL PATCH 68 POPOUTS 76 ASR 76 ASR | M H L N L | 2.00 Slabs 20.00 Slabs 2.00 Slabs 20.00 Slabs 4.00 Slabs 10.00 Slabs | |
| Sample Number: 03 | | | |
| Sample Type: R Sample PCI: 21 Sample Area (Slabs): 20.00 | Sample Co | mments: | |
| 65 JT SEAL DMG 66 SMALL PATCH 67 LARGE PATCH 68 POPOUTS 76 ASR 76 ASR 76 ASR | H L N H L | 20.00 Slabs 2.00 Slabs 10.00 Slabs 20.00 Slabs 1.00 Slabs 3.00 Slabs 16.00 Slabs | |
| Sample Number: 06 | | | |
| Sample Type: R Sample PCI: 32 Sample Area (Slabs): 15.00 | Sample Co | mments: | |
| 65 JT SEAL DMG 67 LARGE PATCH 68 POPOUTS 76 ASR 76 ASR | H L N L M | 15.00 Slabs 2.00 Slabs 15.00 Slabs 2.00 Slabs 10.00 Slabs | |

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

| | | Page 2 |
|-----------------------|--|--|
| | | |
| Sample | Comments: | |
| H L L N | 20.00 Slabs 8.00 Slabs 11.00 Slabs 16.00 Slabs 13.00 Slabs | |
| | , , , , , , , , , , , , , , , , , , , | |
| Sample | Comments: | |
| H L N L M | 24.00 Slabs 6.00 Slabs 24.00 Slabs 2.00 Slabs 17.00 Slabs | |
| | | |
| Sample Comments: | | |
| | H L N M Sample H L N L M | L 8.00 Slabs L 11.00 Slabs N 16.00 Slabs M 13.00 Slabs Sample Comments: H 24.00 Slabs L 6.00 Slabs N 24.00 Slabs L 2.00 Slabs L 2.00 Slabs M 17.00 Slabs |

| 63 LINEAR CR | M | 1.00 Slabs |
|----------------|---|-------------|
| 65 JT SEAL DMG | Н | 24.00 Slabs |
| 66 SMALL PATCH | L | 3.00 Slabs |
| 67 LARGE PATCH | L | 15.00 Slabs |
| 68 POPOUTS | N | 6.00 Slabs |
| 74 JOINT SPALL | M | 1.00 Slabs |
| 76 ASR | Н | 2.00 Slabs |
| 76 ASR | M | 7.00 Slabs |

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

Network ID: PEA Page 3

| TOUTON ID. 1 EX | | | , ago o |
|--|----------------------------|--|--------------|
| Branch Name: APRON | Branch - Section ID: A | 01PE - 002 | Use: APRON |
| LCD: 1/1/2000 Surface Type: PCC Rank: P Section Area (sf): 15,000.00 Length (ft): 200.00 Width (ft): 75.00 From: A01PE-01 To: A01PE-03 | PCI Family | /: lowaPCCAP_SE_General | OSC. 71 NOIN |
| Slabs: 92 Slab Length (ft): 13.00 Slab Width (ft): 12.50 Joint Length (ft): 2,078.85 | Section Co | omments: | |
| Last Insp Date: 3/12/2025 PCI: 17 Total Samples: 4 Surveyed: 3 | Inspection | Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 16 Sample Area (Slabs): 30.00 | Sample Co | omments: | |
| 65 JT SEAL DMG 66 SMALL PATCH 67 LARGE PATCH 76 ASR 76 ASR 76 ASR | H L L H L | 30.00 Slabs 7.00 Slabs 16.00 Slabs 3.00 Slabs 4.00 Slabs 21.00 Slabs | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 17 Sample Area (Slabs): 24.00 | Sample Co | omments: | |
| 65 JT SEAL DMG 66 SMALL PATCH 67 LARGE PATCH 67 LARGE PATCH 76 ASR 76 ASR 76 ASR | H L L M H L | 24.00 Slabs 3.00 Slabs 9.00 Slabs 1.00 Slabs 2.00 Slabs 2.00 Slabs 16.00 Slabs | |
| Sample Number: 03 | | | |
| Sample Type: R Sample PCI: 20 Sample Area (Slabs): 24.00 | Sample Co | omments: | |
| 65 JT SEAL DMG 66 SMALL PATCH 66 SMALL PATCH 67 LARGE PATCH 76 ASR 76 ASR | H L M L H | 24.00 Slabs 2.00 Slabs 1.00 Slabs 4.00 Slabs 2.00 Slabs 2.00 Slabs | |

Μ

14.00 Slabs

76 ASR

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

Network ID: PEA Page 4

| | Branch - Section ID: | A01PE - 003 | |
|--|----------------------|---|------------|
| Branch Name: APRON | | | Use: APRON |
| LCD: 1/1/2000 Surface Type: PCC Rank: P Section Area (sf): 16,500.00 Length (ft): 220.00 Width (ft): 75.00 From: A01PE-02 To: A01PE-04 | | ily: lowaPCCAP_SE_General | |
| Slabs: 106 Slab Length (ft): 12.50 Slab Width (ft): 12.50 Joint Length (ft): 2,345.00 | Section (| Comments: | |
| Last Insp Date: 3/12/2025 PCI: 78 Total Samples: 5 Surveyed: 4 | Inspectio | n Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 82 Sample Area (Slabs): 24.00 | Sample (| Comments: | |
| 65 JT SEAL DMG 67 LARGE PATCH 75 CORNER SPALL | H L M | 24.00 Slabs 1.00 Slabs 1.00 Slabs | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 80 Sample Area (Slabs): 24.00 | Sample 0 | Comments: | |
| 63 LINEAR CR 65 JT SEAL DMG 74 JOINT SPALL 75 CORNER SPALL | M H L L | 1.00 Slabs 24.00 Slabs 1.00 Slabs 1.00 Slabs | |
| Sample Number: 03 | | | |
| Sample Type: R Sample PCI: 64 Sample Area (Slabs): 24.00 | Sample (| Comments: | |
| 63 LINEAR CR 65 JT SEAL DMG 71 FAULTING 74 JOINT SPALL 75 CORNER SPALL | M H L H | 2.00 Slabs 24.00 Slabs 2.00 Slabs 1.00 Slabs 2.00 Slabs | |
| Sample Number: 04 | | | |
| Sample Type: R Sample PCI: 88 Sample Area (Slabs): 18.00 | Sample 0 | Comments: | |

Н

18.00 Slabs

65 JT SEAL DMG

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

Network ID: PEA Page 5

| Network ID. PEA | | | Page 5 |
|--|------------------|----------------------------------|------------|
| | Branch - Section | on ID: A01PE - 004 | |
| Branch Name: APRON | | | Use: APRON |
| LCD: 1/1/2000 Surface Type: PCC Rank: P Section Area (sf): 8,230.00 Length (ft): 110.00 Width (ft): 75.00 From: A01PE-30 To: | | PCI Family: IowaPCCAP_SE_General | |
| Slabs: 60 Slab Length (ft): 10.90 Slab Width (ft): 12.50 Joint Length (ft): 1,228.89 | | Section Comments: | |
| Last Insp Date: 3/12/2025 PCI: 85 Total Samples: 3 Surveyed: 3 | | Inspection Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 88 Sample Area (Slabs): 24.00 65 JT SEAL DMG | н | Sample Comments: 24.00 Slabs | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 87 Sample Area (Slabs): 24.00 | | Sample Comments: | |
| 65 JT SEAL DMG 66 SMALL PATCH | H L | 24.00 Slabs 1.00 Slabs | |
| Sample Number: 03 | | | |
| Sample Type: R | | Sample Comments: | |

Н

L

M

12.00 Slabs 1.00 Slabs

1.00 Slabs

1.00 Slabs

Sample PCI: 76

Sample Area (Slabs): 12.00 65 JT SEAL DMG

66 SMALL PATCH

75 CORNER SPALL

74 JOINT SPALL

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

| 1 avoillont Batabass. I/ (2021 | | | Contrato Bato: 0/11/2020 |
|---|------------------|---------------------------------|--------------------------|
| Network ID: PEA | | | Page (|
| | Branch - Section | n ID: A01PE - 005 | |
| Branch Name: APRON | | | Use: APRON |
| LCD: 7/3/2023 Surface Type: PCC Rank: P Section Area (sf): 80,309.00 Length (ft): 530.00 Width (ft): 150.00 From: SEE MAP To: SEE MAP | PC | CI Family: IowaPCCAP_SE_General | |
| Slabs: 535 Slab Length (ft): 12.00 Slab Width (ft): 12.50 Joint Length (ft): 12,430.22 | Se | ection Comments: | |
| Last Insp Date: 3/12/2025 PCI: 97 Total Samples: 27 Surveyed: 7 | In | spection Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00 65 JT SEAL DMG | Sa L | ample Comments: 20.00 Slabs | |
| Sample Number: 07 | | 20.00 Glabs | |
| Sample Type: R Sample PCI: 94 Sample Area (Slabs): 20.00 | Sa | ample Comments: | |
| 62 CORNER BREAK 65 JT SEAL DMG | L L | 1.00 Slabs 20.00 Slabs | |
| Sample Number: 11 | | | |
| Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00 | | ample Comments: | |
| 65 JT SEAL DMG | L | 20.00 Slabs | |
| Sample Number: 15 | - | | |
| Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00 | | ample Comments: | |
| 65 JT SEAL DMG | L | 20.00 Slabs | |
| Sample Number: 21 | 0 | ample Commenter | |
| Sample Type: R Sample PCI: 98 Sample Area (Slabs): 20.00 | Sa | ample Comments: | |
| 65 JT SEAL DMG | L | 20.00 Slabs | |
| Sample Number: 23 | | | |

Sample Type: R Sample Comments:

Sample PCI: 94

Sample Area (Slabs): 20.00

62 CORNER BREAK 1.00 Slabs 65 JT SEAL DMG L 20.00 Slabs

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

Network ID: PEA Page 7

Sample Number: 26

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JT SEAL DMG L 20.00 Slabs

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

Network ID: PEA Page 8

PCI Family: IowaPCCRW SE General

Branch - Section ID: R16PE - 001

Use: RUNWAY Branch Name: RUNWAY 16/34

LCD: 11/3/2020 Surface Type: PCC

Rank: P

Section Area (sf): 148,196.00

Length (ft): 1,000.00 Width (ft): 75.00 From: RUNWAY END 34 To: RUNWAY SECT 02

Slabs: 790

Slab Length (ft): 15.00 Slab Width (ft): 12.50 Joint Length (ft): 19,611.27

Last Insp Date: 3/12/2025

PCI: 98

Total Samples: 39 Surveyed: 8

Sample Number: 03

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 21.00

65 JT SEAL DMG

Sample Number: 04

Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 21.00

65 JT SEAL DMG

Sample Number: 11

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 21.00

65 JT SEAL DMG

Sample Number: 12 Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 21.00

65 JT SEAL DMG

Sample Number: 27

Sample Type: R

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JT SEAL DMG

Sample Number: 28

Sample Type: R

Sample PCI: 98 Sample Area (Slabs): 20.00

65 JT SEAL DMG

Sample Comments:

Section Comments:

Inspection Comments:

Sample Comments:

L

L

L

L

L

21.00 Slabs

Sample Comments:

Sample Comments:

21.00 Slabs

21.00 Slabs

21.00 Slabs

Sample Comments:

20.00 Slabs

Sample Comments:

20.00 Slabs

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

Network ID: PEA Page 9

Sample Number: 33

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JT SEAL DMG L 20.00 Slabs

Sample Number: 34

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 20.00

65 JT SEAL DMG L 20.00 Slabs

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

Network ID: PEA Page 10

| Network ID: PEA | | | Page 10 |
|--|------------------|---|-------------|
| Branch Name: RUNWAY 16/34 | Branch - Section | on ID: R16PE - 003 | Use: RUNWAY |
| LCD: 10/2/1969 Surface Type: PCC Rank: P Section Area (sf): 139,475.00 Length (ft): 2,800.00 Width (ft): 50.00 From: CENT 50' FROM SECT 01 To: RUNWAY END 16 | | PCI Family: lowaPCCRW_SE_General | |
| Slabs: 744 Slab Length (ft): 15.00 Slab Width (ft): 12.50 Joint Length (ft): 17,617.02 Last Insp Date: 3/12/2025 | | Section Comments: Inspection Comments: | |
| PCI: 82 Total Samples: 38 Surveyed: 8 | | inspection comments. | |
| Sample Number: 06 | | | |
| Sample Type: R Sample PCI: 80 Sample Area (Slabs): 20.00 | | Sample Comments: | |
| 65 JT SEAL DMG 66 SMALL PATCH 67 LARGE PATCH 75 CORNER SPALL 76 ASR | L L H L | 20.00 Slabs 2.00 Slabs 1.00 Slabs 1.00 Slabs 2.00 Slabs | |
| Sample Number: 07 | | | |
| Sample Type: R Sample PCI: 75 Sample Area (Slabs): 20.00 63 LINEAR CR 65 JT SEAL DMG 66 SMALL PATCH 67 LARGE PATCH 73 SHRINKAGE CR | L L L L | Sample Comments: 1.00 Slabs 20.00 Slabs 3.00 Slabs 1.00 Slabs 3.00 Slabs | |
| 76 ASR | N L | 3.00 Slabs | |
| Sample Number: 16 | | | |
| Sample Type: R Sample PCI: 89 Sample Area (Slabs): 20.00 | | Sample Comments: | |
| 65 JT SEAL DMG 66 SMALL PATCH 67 LARGE PATCH 73 SHRINKAGE CR | L L L | 20.00 Slabs 1.00 Slabs 2.00 Slabs 2.00 Slabs | |
| Sample Number: 17 | | | |
| Sample Type: R Sample PCI: 89 | | Sample Comments: | |

L

20.00 Slabs

3.00 Slabs

Sample Area (Slabs): 20.00 65 JT SEAL DMG

67 LARGE PATCH

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

Network ID: PEA Page 11

Sample Type: R Sample Comments:

Sample PCI: 82

Sample Area (Slabs): 20.00

 65 JT SEAL DMG
 L
 20.00 Slabs

 67 LARGE PATCH
 L
 4.00 Slabs

 67 LARGE PATCH
 M
 1.00 Slabs

Sample Number: 27

Sample Type: R Sample Comments:

Sample PCI: 86

Sample Area (Slabs): 20.00

 63 LINEAR CR
 M
 1.00 Slabs

 65 JT SEAL DMG
 L
 20.00 Slabs

 66 SMALL PATCH
 L
 1.00 Slabs

Sample Number: 31

Sample Type: R Sample Comments:

Sample PCI: 64

Sample Area (Slabs): 20.00

 63 LINEAR CR
 M
 3.00 Slabs

 65 JT SEAL DMG
 L
 20.00 Slabs

 66 SMALL PATCH
 L
 2.00 Slabs

 67 LARGE PATCH
 L
 2.00 Slabs

 73 SHRINKAGE CR
 N
 5.00 Slabs

Sample Number: 34

Sample Type: R Sample Comments:

Sample PCI: 91

Sample Area (Slabs): 20.00

 65 JT SEAL DMG
 L
 20.00 Slabs

 66 SMALL PATCH
 L
 1.00 Slabs

 67 LARGE PATCH
 L
 2.00 Slabs

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

Network ID: PEA Page 12

| Network ID: PEA | | | Page 1 |
|---|------------------|------------------------------|------------|
| | Branch - Section | ID: R16PE - 005 | |
| Branch Name: RUNWAY 16/34 | | | Use: RUNWA |
| LCD: 6/1/1989 Surface Type: PCC Rank: P Section Area (sf): 5,765.00 Length (ft): 66.00 Width (ft): 88.00 From: R16PE-04 To: | PC | Family: IowaPCCRW_SE_General | |
| Slabs: 33 Slab Length (ft): 13.20 Slab Width (ft): 13.30 Joint Length (ft): 717.34 | Sec | ction Comments: | |
| Last Insp Date: 3/12/2025 PCI: 38 Total Samples: 2 Surveyed: 2 | Insį | pection Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 32 Sample Area (Slabs): 15.00 | Sar | nple Comments: | |
| 63 LINEAR CR | L | 1.00 Slabs | |
| 63 LINEAR CR | M | 1.00 Slabs | |
| 65 JT SEAL DMG | Н | 15.00 Slabs | |
| 66 SMALL PATCH | L | 6.00 Slabs | |
| 67 LARGE PATCH | L | 4.00 Slabs | |
| 76 ASR | L | 6.00 Slabs | |
| 76 ASR | M | 5.00 Slabs | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 43 Sample Area (Slabs): 18 00 | Sar | nple Comments: | |

Sample Area (Slabs): 18.00

| 65 JT SEAL DMG | Н | 18.00 Slabs |
|----------------|---|-------------|
| 66 SMALL PATCH | L | 5.00 Slabs |
| 76 ASR | L | 9.00 Slabs |
| 76 ASR | M | 7.00 Slabs |

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

Network ID: PEA Page 13

| | - | ID D/4000 444 | Ţ. | | | |
|--|------------------|---------------------------------|-------------|--|--|--|
| Branch Name: RUNWAY 16/34 | Branch - Section | ID: R16PE - 006 | Use: RUNWAY | | | |
| | | | USE. RUNWAY | | | |
| LCD: 6/1/1989 Surface Type: PCC Rank: P Section Area (sf): 82,427.00 Length (ft): 1,000.00 Width (ft): 75.00 From: R16PE-03 To: R16PE-09 | PC | CI Family: lowaPCCRW_SE_General | | | | |
| Slabs: 559 Slab Length (ft): 11.80 Slab Width (ft): 12.50 Joint Length (ft): 12,398.05 | Se | Section Comments: | | | | |
| Last Insp Date: 3/12/2025 PCI: 89 Total Samples: 25 | Ins | pection Comments: | | | | |
| Surveyed: 7 | | | | | | |
| Sample Number: 02 | | | | | | |
| Sample Type: R Sample PCI: 93 Sample Area (Slabs): 24.00 | Sa | mple Comments: | | | | |
| 65 JT SEAL DMG | L | 24.00 Slabs | | | | |
| 66 SMALL PATCH | L | 1.00 Slabs | | | | |
| 67 LARGE PATCH 74 JOINT SPALL | L | 1.00 Slabs 1.00 Slabs | | | | |
| Sample Number: 03 | | 1.00 Class | | | | |
| Sample Type: R Sample PCI: 85 Sample Area (Slabs): 24.00 | Sa | mple Comments: | | | | |
| 65 JT SEAL DMG | M | 24.00 Slabs | | | | |
| 66 SMALL PATCH | L | 1.00 Slabs | | | | |
| 67 LARGE PATCH | L | 3.00 Slabs | | | | |
| 75 CORNER SPALL Sample Number: 10 | L | 1.00 Slabs | | | | |
| • | 0- | monte Communitati | | | | |
| Sample Type: R Sample PCI: 97 Sample Area (Slabs): 24.00 | Sa | mple Comments: | | | | |
| 65 JT SEAL DMG | L | 24.00 Slabs | | | | |
| 66 SMALL PATCH | L | 1.00 Slabs | | | | |
| Sample Number: 11 | | | | | | |
| Sample Type: R Sample PCI: 89 Sample Area (Slabs): 24.00 | Sa | mple Comments: | | | | |
| 63 LINEAR CR | L | 1.00 Slabs | | | | |
| 65 JT SEAL DMG | L | 24.00 Slabs | | | | |

2.00 Slabs

67 LARGE PATCH

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

Network ID: PEA Page 14

Sample Number: 14

Sample Type: R Sample Comments:

Sample PCI: 88

Sample Area (Slabs): 24.00

65 JT SEAL DMG L 24.00 Slabs 71 FAULTING L 3.00 Slabs

Sample Number: 15

Sample Type: R Sample Comments:

Sample PCI: 81

Sample Area (Slabs): 24.00

 65 JT SEAL DMG
 L
 24.00 Slabs

 71 FAULTING
 L
 6.00 Slabs

Sample Number: 20

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (Slabs): 24.00

 65 JT SEAL DMG
 L
 24.00 Slabs

 66 SMALL PATCH
 L
 1.00 Slabs

 67 LARGE PATCH
 L
 1.00 Slabs

 74 JOINT SPALL
 L
 1.00 Slabs

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

Network ID: PEA Page 15

| D. J. N. DUNIMAY 40/04 | Branch - Section ID: F | R16PE - 007 | LL DUNNAAV |
|--|------------------------|---------------------------|-------------|
| Branch Name: RUNWAY 16/34 | | | Use: RUNWAY |
| LCD: 6/1/1989 Surface Type: PCC Rank: P Section Area (sf): 36,341.00 Length (ft): 400.00 Width (ft): 75.00 From: R16PE-01 To: R16PE-08 | PCI Famil | ly: IowaPCCRW_SE_General | |
| Slabs: 255 Slab Length (ft): 11.40 Slab Width (ft): 12.50 Joint Length (ft): 5,519.69 | Section C | omments: | |
| Last Insp Date: 3/12/2025 PCI: 85 Total Samples: 12 Surveyed: 6 | Inspection | n Comments: | |
| Sample Number: 03 | | | |
| Sample Type: R Sample PCI: 84 Sample Area (Slabs): 18.00 | Sample C M | omments: 18.00 Slabs | |
| 65 JT SEAL DMG 67 LARGE PATCH | M | 1.00 Slabs | |
| Sample Number: 04 | | | |
| Sample Type: R Sample PCI: 76 Sample Area (Slabs): 18.00 | Sample C | comments: | |
| 65 JT SEAL DMG | L | 18.00 Slabs | |
| 66 SMALL PATCH 67 LARGE PATCH | L L | 3.00 Slabs 1.00 Slabs | |
| 67 LARGE PATCH | M | 1.00 Slabs | |
| 75 CORNER SPALL | M | 1.00 Slabs | |
| Sample Number: 06 | | | |
| Sample Type: R Sample PCI: 92 Sample Area (Slabs): 24.00 | Sample C | comments: | |
| 65 JT SEAL DMG | M | 24.00 Slabs | |
| 74 JOINT SPALL Sample Number: 07 | L | 1.00 Slabs | |
| • | Campula C | | |
| Sample Type: R Sample PCI: 93 Sample Area (Slabs): 24.00 | Sample C | comments: | |
| 65 JT SEAL DMG 66 SMALL PATCH | L L | 24.00 Slabs 3.00 Slabs | |

66 SMALL PATCH

1.00 Slabs

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

Network ID: PEA Page 16

Sample Number: 09

Sample Type: R Sample Comments:

Sample PCI: 89

Sample Area (Slabs): 24.00

 65 JT SEAL DMG
 L
 24.00 Slabs

 66 SMALL PATCH
 L
 3.00 Slabs

 71 FAULTING
 L
 2.00 Slabs

Sample Number: 12

Sample Type: R Sample Comments:

Sample PCI: 74

Sample Area (Slabs): 21.00

| 63 LINEAR CR | M | 1.00 | Slabs |
|----------------|---|-------|-------|
| 65 JT SEAL DMG | L | 21.00 | Slabs |
| 66 SMALL PATCH | L | 3.00 | Slabs |
| 66 SMALL PATCH | M | 1.00 | Slabs |
| 67 LARGE PATCH | L | 1.00 | Slabs |
| 76 ASR | L | 2.00 | Slabs |

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

Network ID: PEA Page 17

Branch - Section ID: R16PE - 008

PCI Family: lowaPCCRW SE General

Inspection Comments:

Sample Comments:

Branch Name: RUNWAY 16/34

Use: RUNWAY

LCD: 10/10/2004 Surface Type: PCC

Rank: P

Section Area (sf): 10,953.00

Length (ft): 185.00 Width (ft): 80.00 From: R16PE-07

To: ..

Slabs: 86 Section Comments:

Slab Length (ft): 11.30 Slab Width (ft): 11.30 Joint Length (ft): 1,742.47

Last Insp Date: 3/12/2025

PCI: 93 Total Samples: 4 Surveyed: 3

CI: 93

Sample Number: 01

Sample Type: R

Sample PCI: 93

Sample Area (Slabs): 21.00

65 JT SEAL DMG M 21.00 Slabs

Sample Number: 02

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (Slabs): 21.00

65 JT SEAL DMG M 21.00 Slabs

Sample Number: 03

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (Slabs): 23.00

65 JT SEAL DMG M 23.00 Slabs

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

Network ID: PEA Page 18

| Network ID: PEA | | | Page 18 |
|--|------------------|----------------------------------|-------------|
| | Branch - Section | on ID: R16PE - 009 | |
| Branch Name: RUNWAY 16/34 | | | Use: RUNWAY |
| LCD: 10/10/2004 Surface Type: PCC Rank: P Section Area (sf): 12,832.00 Length (ft): 185.00 Width (ft): 113.00 From: R16PE-06 To: | | PCI Family: lowaPCCRW_SE_General | |
| Slabs: 106 Slab Length (ft): 11.00 Slab Width (ft): 11.00 Joint Length (ft): 2,150.17 | • | Section Comments: | |
| Last Insp Date: 3/12/2025 PCI: 86 Total Samples: 5 Surveyed: 4 | l | nspection Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 88 Sample Area (Slabs): 17.00 | : | Sample Comments: | |
| 65 JT SEAL DMG | Н | 17.00 Slabs | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 88 Sample Area (Slabs): 20.00 | : | Sample Comments: | |
| 65 JT SEAL DMG | Н | 20.00 Slabs | |
| Sample Number: 03 | | | |
| Sample Type: R Sample PCI: 88 Sample Area (Slabs): 20.00 | , | Sample Comments: | |
| 65 JT SEAL DMG | Н | 20.00 Slabs | |
| Sample Number: 05 | | | |
| | | | |

Sample Comments:

25.00 Slabs

1.00 Slabs

1.00 Slabs

Н

L

Sample Type: R

Sample PCI: 81

Sample Area (Slabs): 25.00 65 JT SEAL DMG

71 FAULTING

74 JOINT SPALL

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

Network ID: PEA Page 19

Branch - Section ID: R16PE - 010

Branch Name: RUNWAY 16/34 Use: RUNWAY

PCI Family: lowaPCCRW SE General

LCD: 10/1/2011 Surface Type: PCC

Rank: P

Section Area (sf): 15,600.00

Length (ft): 208.00 Width (ft): 75.00 From: R16-07 To: R16-01

Slabs: 84 Section Comments:

Slab Length (ft): 14.80 Slab Width (ft): 12.50 Joint Length (ft): 2,019.05

Last Insp Date: 3/12/2025 Inspection Comments:

PCI: 95 Total Samples: 4 Surveyed: 3

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 93

Sample Area (Slabs): 27.00

65 JT SEAL DMG M 27.00 Slabs

Sample Number: 02

Sample Type: R Sample Comments:

Sample PCI: 95

Sample Area (Slabs): 27.00

65 JT SEAL DMG L 27.00 Slabs 67 LARGE PATCH L 1.00 Slabs

Sample Number: 03

Sample Type: R Sample Comments:

Sample PCI: 98

Sample Area (Slabs): 27.00

65 JT SEAL DMG L 27.00 Slabs

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

Network ID: PEA Page 20

| NOWOTK ID. I L/K | | | 1 agc 20 |
|--|------------------|--|-------------|
| Branch Name: RUNWAY 16/34 | Branch - Sect | ion ID: R16PE - 011 | Use: RUNWAY |
| LCD: 10/2/1989 Surface Type: PCC Rank: P Section Area (sf): 7,089.00 Length (ft): 78.00 Width (ft): 80.00 From: R16PE-10 To: END | | PCI Family: lowaPCCRW_SE_General | |
| Slabs: 55 Slab Length (ft): 13.00 Slab Width (ft): 10.00 Joint Length (ft): 1,074.71 | | Section Comments: | |
| Last Insp Date: 3/12/2025 PCI: 13 Total Samples: 3 Surveyed: 3 | | Inspection Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 13 Sample Area (Slabs): 18.00 | | Sample Comments: | |
| 65 JT SEAL DMG 76 ASR 76 ASR | H H M | 18.00 Slabs 15.00 Slabs 3.00 Slabs | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 13 Sample Area (Slabs): 18.00 | | Sample Comments: | |
| 65 JT SEAL DMG 76 ASR 76 ASR 76 ASR | H H L M | 18.00 Slabs 10.00 Slabs 1.00 Slabs 7.00 Slabs | |
| Sample Number: 03 | | | |
| Sample Type: R Sample PCI: 13 Sample Area (Slabs): 19.00 | | Sample Comments: | |
| 65 JT SEAL DMG 67 LARGE PATCH 76 ASR | H L H | 19.00 Slabs 1.00 Slabs 8.00 Slabs | |

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5.00 Slabs

6.00 Slabs

76 ASR

76 ASR

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

Network ID: PEA Page 21

| Network ID: PEA | | | Page 21 |
|--|---------------------|------------------------------|--------------|
| | Branch - Section II | D: T01PE - 001 | |
| Branch Name: TAXIWAY 01 | | | Use: TAXIWAY |
| LCD: 6/1/1969 Surface Type: PCC Rank: P Section Area (sf): 4,049.00 Length (ft): 93.00 Width (ft): 35.00 From: APRON 01 To: RUNWAY 16/34 | PCI F | amily: lowaPCCTW_SE_General | |
| Slabs: 34 Slab Length (ft): 13.80 Slab Width (ft): 9.25 Joint Length (ft): 571.91 | Section | on Comments: avg slab length | |
| Last Insp Date: 3/12/2025 PCI: 12 Total Samples: 2 Surveyed: 2 | Inspe | ction Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 18 Sample Area (Slabs): 12.00 | Samp | ele Comments: | |
| 63 LINEAR CR | М | 2.00 Slabs | |
| 65 JT SEAL DMG | н | 12.00 Slabs | |
| 66 SMALL PATCH | L | 3.00 Slabs | |
| 67 LARGE PATCH | L | 12.00 Slabs | |
| 68 POPOUTS | N | 9.00 Slabs | |
| 76 ASR | L | 2.00 Slabs | |
| 76 ASR | M | 10.00 Slabs | |
| Sample Number: 02 | | | |
| Sample Type: R Sample PCI: 9 Sample Area (Slabs): 22.00 | Samp | le Comments: | |
| 62 CORNER BREAK | L | 1.00 Slabs | |
| 63 LINEAR CR | M | 1.00 Slabs | |
| 65 JT SEAL DMG | H | 22.00 Slabs | |
| 66 SMALL PATCH | Ľ | 6.00 Slabs | |
| 66 SMALL PATCH | M | 7.00 Slabs | |
| 67 LARGE PATCH | L | 7.00 Slabs | |
| OF EAROLT ATOT | L | 1.00 Glabs | |

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12.00 Slabs

6.00 Slabs

2.00 Slabs

11.00 Slabs

68 POPOUTS

76 ASR

76 ASR

76 ASR

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

Network ID: PEA Page 22

Branch - Section ID: T01PE - 002

Branch Name: TAXIWAY 01 Use: TAXIWAY

LCD: 11/3/2020 Surface Type: PCC

Rank: P

Section Area (sf): 7,625.00

Length (ft): 175.00 Width (ft): 35.00 From: T01-02 To: RUNWAY 16/34

Slabs: 81

Slab Length (ft): 10.00

Slab Width (ft): 9.25 Joint Length (ft): 1,309.75

Last Insp Date: 3/12/2025

PCI: 96 Total Samples: 4 Surveyed: 3

Section Comments:

PCI Family: lowaPCCTW SE General

Inspection Comments:

Sample Number: 01

Sample Type: R

Sample PCI: 93

Sample Area (Slabs): 21.00

65 JT SEAL DMG

76 ASR

Sample Comments:

Sample Comments:

Sample Number: 02

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 20.00

65 JT SEAL DMG

L 20.00 Slabs

L

L

Sample Number: 03

Sample Type: R Sample PCI: 98

Sample Area (Slabs): 20.00

65 JT SEAL DMG L

Sample Comments:

20.00 Slabs

21.00 Slabs

1.00 Slabs

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

Network ID: PEA Page 23

| Network ID: PEA | | | Page 23 |
|--|----------------------|---------------------------|---------------|
| | Branch - Section ID: | TH01PE - 001 | |
| Branch Name: T-HANGAR 01 | | | Use: T-HANGAR |
| LCD: 1/1/1969 Surface Type: PCC Rank: P Section Area (sf): 20,811.00 Length (ft): 1,010.00 Width (ft): 20.00 From: SEE MAP To: SEE MAP | PCI Fa | mily: IowaPCCTH_SE | |
| Slabs: 208 Slab Length (ft): 10.00 Slab Width (ft): 10.00 Joint Length (ft): 3,101.05 | Section | n Comments: | |
| Last Insp Date: 3/12/2025 PCI: 64 Total Samples: 10 Surveyed: 5 | Inspec | tion Comments: | |
| Sample Number: 01 | | | |
| Sample Type: R Sample PCI: 45 Sample Area (Slabs): 18.00 | Sample | e Comments: | |
| 62 CORNER BREAK | Н | 2.00 Slabs | |
| 63 LINEAR CR | L | 2.00 Slabs | |
| 63 LINEAR CR | M | 2.00 Slabs | |
| 65 JT SEAL DMG | Н | 18.00 Slabs | |
| 71 FAULTING | L | 1.00 Slabs | |
| 75 CORNER SPALL | M | 2.00 Slabs | |
| Sample Number: 03 | 0 | | |
| Sample Type: R Sample PCI: 85 Sample Area (Slabs): 20.00 | Sample | e Comments: | |
| 66 SMALL PATCH | Н | 1.00 Slabs | |
| 71 FAULTING | L | 1.00 Slabs | |
| 74 JOINT SPALL | L | 1.00 Slabs | |
| 75 CORNER SPALL | L | 1.00 Slabs | |
| Sample Number: 05 | Compl | Commente | |
| Sample Type: R Sample PCI: 83 Sample Area (Slabs): 18.00 | Sample | e Comments: | |
| 65 JT SEAL DMG 75 CORNER SPALL | Н Н | 18.00 Slabs 1.00 Slabs | |
| Sample Number: 06 | | 1.00 Clabo | |
| Sample Type: R Sample PCI: 41 Sample Area (Slabs): 18.00 | Sample | e Comments: | |
| 63 LINEAR CR | M | 1.00 Slabs | |
| 65 JT SEAL DMG | H | 18.00 Slabs | |
| 72 SHAT. SLAB | M | 1.00 Slabs | |
| 74 JOINT SPALL | M | 1.00 Slabs | |
| 75 CODNED CDALL | 11 | 4 00 Claba | |

Н

Μ

1.00 Slabs

3.00 Slabs

75 CORNER SPALL

76 ASR

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

Network ID: PEA Page 24

Sample Number: 09

Sample Type: R Sample Comments:

Sample PCI: 61

Sample Area (Slabs): 18.00

 62 CORNER BREAK
 H
 1.00 Slabs

 62 CORNER BREAK
 M
 1.00 Slabs

 63 LINEAR CR
 M
 2.00 Slabs

 65 JT SEAL DMG
 H
 18.00 Slabs

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

Network ID: PEA Page 25

Branch - Section ID: TH01PE - 002

PCI Family: IowaPCCTH SE

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

LCD: 6/10/2017 Surface Type: PCC

Rank: P

Section Area (sf): 2,541.00

Length (ft): 160.00 Width (ft): 15.00 From: SEE MAP To: SEE MAP

Slabs: 30 Section Comments:

Slab Length (ft): 11.40 Slab Width (ft): 7.50 Joint Length (ft): 376.41

Last Insp Date: 3/12/2025 Inspection Comments:

PCI: 86 Total Samples: 2 Surveyed: 2

Sample Number: 01

Sample Type: R Sample Comments:

Sample PCI: 88

Sample Area (Slabs): 16.00

65 JT SEAL DMG H 16.00 Slabs

Sample Number: 02

Sample Type: R Sample Comments:

Sample PCI: 83

Sample Area (Slabs): 14.00

65 JT SEAL DMG H 14.00 Slabs 75 CORNER SPALL H 1.00 Slabs

APPENDIX D WORK HISTORY REPORT

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

Network ID: PEA Page 1

Network: PELLA MUNICIPAL AIRPORT

Branch - Section ID: A01PE - 001

 LCD: 6/3/1969
 Length (ft):
 200.00

 Use: APRON
 Width (ft):
 236.00

 Rank: P
 True Area (sf):
 47,200.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|---------------------------|--------|----------------|-------------|-----------------------------|
| 06-01-2020 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | EST |
| 06-09-2017 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-08-2017 | CS-PC | Crack Sealing - PCC | \$0.00 | 0.00 | False | - |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 10-01-2011 | SL-PC | Slab Replacement - PCC | \$0.00 | 0.00 | False | Federal Funding - \$179,757 |
| 06-03-1969 | NC-PC | New Construction - PCC | \$0.00 | 6.00 | True | 6" P501 PCC SURFACE |
| 06-02-1969 | SB-AG | Subbase - Aggregate | \$0.00 | 4.00 | False | 4" P154 SUBBASE |
| 06-01-1969 | SG-CO | Subgrade - Compacted | \$0.00 | 0.00 | False | P152 COMPACTED SUBGRADE |

Branch - Section ID: A01PE - 002

 LCD: 1/1/2000
 Length (ft):
 200.00

 Use: APRON
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 15,000.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|----------------------------|--------|----------------|-------------|----------|
| 06-01-2020 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | EST |
| 06-09-2017 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-08-2017 | CS-PC | Crack Sealing - PCC | \$0.00 | 0.00 | False | - |
| 06-08-2017 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | PARTIAL |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 01-01-2000 | NC-IN | New Construction - Initial | \$0.00 | 0.00 | True | - |

Branch - Section ID: A01PE - 003

 LCD: 1/1/2000
 Length (ft):
 220.00

 Use: APRON
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 16,500.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|----------------------------|--------|-------------------|-------------|----------|
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 01-01-2000 | NC-IN | New Construction - Initial | \$0.00 | 0.00 | True | - |

Branch - Section ID: A01PE - 004

 LCD: 1/1/2000
 Length (ft):
 110.00

 Use: APRON
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 8,230.00

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|----------------------------|--------|-------------------|-------------|----------|
| 01-01-2000 | NC-IN | New Construction - Initial | \$0.00 | 0.00 | True | - |

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

Network ID: PEA Page 2

Branch - Section ID: A01PE - 005

 LCD: 7/3/2023
 Length (ft):
 530.00

 Use: APRON
 Width (ft):
 150.00

 Rank: P
 True Area (sf):
 80,309.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|------------------------|--------------|----------------|-------------|---|
| 07-03-2023 | NC-PC | New Construction - PCC | \$799,992.00 | 6.00 | True | 6" PCC PAVEMENT |
| 07-02-2023 | SB-AG | Subbase - Aggregate | \$0.00 | 6.00 | False | 6" MODIFIED SUBBASE (SPECIFICATION 2010 2.04 D. 3.) |
| 07-01-2023 | SG-CO | Subgrade - Compacted | \$0.00 | 6.00 | False | 6" SUBGRADE PREPARATION PER SPECIFICATION SECTION 2010 |

Branch - Section ID: R16PE - 001

 LCD: 11/3/2020
 Length (ft):
 1,000.00

 Use: RUNWAY
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 148,196.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|-------------------------------|-------------|----------------|-------------|--|
| 11-03-2020 | CR-PC | Complete Reconstruction - PCC | \$0.00 | 6.00 | True | 6" cement concrete pavement |
| 11-02-2020 | SG-ST | Subgrade - Stabilized | \$0.00 | 8.00 | False | 8" cement treated subgrade |
| 11-01-2020 | SG-CO | Subgrade - Compacted | \$0.00 | 0.00 | False | Existing clay subgrade |
| 06-09-2017 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | PATCHING, GIVEN EXISITNG CS: 6"P-501/ 4"P-208 (ASSUMED MAT.) |
| 06-08-2017 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | PARTIAL |
| 06-08-2017 | CS-PC | Crack Sealing - PCC | \$0.00 | 0.00 | False | - |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 10-01-2011 | SL-PC | Slab Replacement - PCC | \$0.00 | 0.00 | False | Federal Funding - \$179,757 |
| 06-01-2007 | PA-PP | Patching - PCC Partial Depth | \$10,163.00 | 0.00 | False | Total Project Cost: \$44,187 |
| 10-02-1989 | NC-PC | New Construction - PCC | \$0.00 | 6.00 | True | 6" P-501 |
| 10-01-1989 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 |

Branch - Section ID: R16PE - 003

 LCD: 10/2/1969
 Length (ft):
 2,800.00

 Use: RUNWAY
 Width (ft):
 50.00

 Rank: P
 True Area (sf):
 139,475.00

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|------------------------------|-------------|----------------|-------------|--|
| 11-02-2021 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | - |
| 11-01-2021 | PA-PP | Patching - PCC Partial Depth | \$0.00 | 0.00 | False | - |
| 11-01-2021 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-09-2017 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | PATCHING, GIVEN EXISITNG CS: 6"P-501/ 4"P-208 (ASSUMED MAT.) |
| 06-08-2017 | CS-PC | Crack Sealing - PCC | \$0.00 | 0.00 | False | - |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-01-2007 | PA-PP | Patching - PCC Partial Depth | \$14,582.00 | 0.00 | False | Total Project Cost: \$44,187 |
| 10-02-1969 | NC-PC | New Construction - PCC | \$0.00 | 6.00 | True | 6" P501 |
| 10-01-1969 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 |

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

Network ID: PEA Page 3

Branch - Section ID: R16PE - 005

 LCD: 6/1/1989
 Length (ft):
 66.00

 Use: RUNWAY
 Width (ft):
 88.00

 Rank: P
 True Area (sf):
 5,765.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|------------------------------|--------|-------------------|-------------|--------------------------------|
| 11-01-2021 | PA-PP | Patching - PCC Partial Depth | \$0.00 | 0.00 | False | - |
| 06-01-1989 | NC-IN | New Construction - Initial | \$0.00 | 0.00 | True | ESTIMATED CS: 6"P-501/ 4"P-208 |

Branch - Section ID: R16PE - 006

 LCD: 6/1/1989
 Length (ft):
 1,000.00

 Use: RUNWAY
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 82,427.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|------------------------------|------------|----------------|-------------|---|
| 11-02-2021 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | - |
| 11-01-2021 | PA-PP | Patching - PCC Partial Depth | \$0.00 | 0.00 | False | - |
| 11-01-2021 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 11-13-2017 | PA-PP | Patching - PCC Partial Depth | \$0.00 | 0.00 | False | ESTIMATED CS: 6"P-501/ 4"P-208 (ASSUMED MAT.) |
| 11-13-2017 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | PARTIAL |
| 06-01-2007 | PA-PP | Patching - PCC Partial Depth | \$8,396.00 | 0.00 | False | Total Project Cost: \$44,187 |
| 06-01-1989 | NC-IN | New Construction - Initial | \$0.00 | 6.00 | True | 6" P-501 |
| 05-31-1989 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 |

Branch - Section ID: R16PE - 007

 LCD: 6/1/1989
 Length (ft):
 400.00

 Use: RUNWAY
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 36,341.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|------------------------------|------------|----------------|-------------|---|
| 11-02-2021 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | - |
| 11-01-2021 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 11-01-2021 | PA-PP | Patching - PCC Partial Depth | \$0.00 | 0.00 | False | - |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | ESTIMATED CS CS: 6"P-501/ 4"P-208 (ASSUMED MAT.) |
| 06-01-2007 | PA-PP | Patching - PCC Partial Depth | \$3,977.00 | 0.00 | False | Total Project Cost: \$44,187 |
| 06-01-1989 | NC-IN | New Construction - Initial | \$0.00 | 6.00 | True | 6" P-501 |
| 05-31-1989 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 |

Branch - Section ID: R16PE - 008

 LCD: 10/10/2004
 Length (ft):
 185.00

 Use: RUNWAY
 Width (ft):
 80.00

 Rank: P
 True Area (sf):
 10,953.00

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|-------------------------|--------|-------------------|-------------|------------------------------|
| 10-10-2004 | NC-PC | New Construction - PCC | \$0.00 | 6.00 | True | 6" P-501 PCC SURFACE |
| 10-09-2004 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 ABC |
| 10-08-2004 | SG-CO | Subgrade - Compacted | \$0.00 | 12.00 | False | 12" P-152 COMPACTED SUBGRADE |

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

Network ID: PEA Page 4

Branch - Section ID: R16PE - 009

 LCD: 10/10/2004
 Length (ft):
 185.00

 Use: RUNWAY
 Width (ft):
 113.00

 Rank: P
 True Area (sf):
 12,832.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|-------------------------|--------|----------------|-------------|------------------------------|
| 10-10-2004 | NC-PC | New Construction - PCC | \$0.00 | 6.00 | True | 6" P-501 PCC SURFACE |
| 10-09-2004 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 ABC |
| 10-08-2004 | SG-CO | Subgrade - Compacted | \$0.00 | 12.00 | False | 12" P-152 COMPACTED SUBGRADE |

Branch - Section ID: R16PE - 010

 LCD: 10/1/2011
 Length (ft):
 208.00

 Use: RUNWAY
 Width (ft):
 75.00

 Rank: P
 True Area (sf):
 15,600.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|-------------------------------|--------|----------------|-------------|--------------------------------|
| 11-02-2021 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | - |
| 11-01-2021 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 10-01-2011 | CR-PC | Complete Reconstruction - PCC | \$0.00 | 0.00 | True | ESTIMATED CS: 6"P-501/ 4"P-208 |
| 06-01-1989 | NC-PC | New Construction - PCC | \$0.00 | 6.00 | True | 6" P-501 |
| 05-31-1989 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 |

Branch - Section ID: R16PE - 011

 LCD: 10/2/1989
 Length (ft):
 78.00

 Use: RUNWAY
 Width (ft):
 80.00

 Rank: P
 True Area (sf):
 7,089.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|------------------------------|-------------|----------------|-------------|--|
| 06-09-2017 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | PATCHING, GIVEN EXISITNG CS: 6"P-501/ 4"P-208 (ASSUMED MAT.) |
| 06-08-2017 | JS-LC | Joint Seal (Localized) | \$0.00 | 0.00 | False | PARTIAL |
| 06-08-2017 | CS-PC | Crack Sealing - PCC | \$0.00 | 0.00 | False | - |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 10-01-2011 | SL-PC | Slab Replacement - PCC | \$0.00 | 0.00 | False | Federal Funding - \$179,757 |
| 06-01-2007 | PA-PP | Patching - PCC Partial Depth | \$10,163.00 | 0.00 | False | Total Project Cost: \$44,187 |
| 10-02-1989 | NC-PC | New Construction - PCC | \$0.00 | 6.00 | True | 6" P-501 |
| 10-01-1989 | BA-AG | Base Course - Aggregate | \$0.00 | 4.00 | False | 4" P-208 |

Branch - Section ID: T01PE - 001

 LCD: 6/1/1969
 Length (ft):
 93.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 4,049.00

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|---------------------------|--------|-------------------|-------------|------------------|
| 05-01-2022 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | EST |
| 06-09-2017 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-08-2017 | CS-PC | Crack Sealing - PCC | \$0.00 | 0.00 | False | - |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-01-1969 | NC-PC | New Construction - PCC | \$0.00 | 0.00 | True | 6" P501/ 4" P208 |

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

Network ID: PEA Page 5

Branch - Section ID: T01PE - 002

 LCD: 11/3/2020
 Length (ft):
 175.00

 Use: TAXIWAY
 Width (ft):
 35.00

 Rank: P
 True Area (sf):
 7,625.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|-------------------------------|--------------|-------------------|-------------|-------------------------------------|
| 11-03-2020 | CR-PC | Complete Reconstruction - PCC | \$132,230.00 | 6.00 | True | 6" CEMENT CONCRETE PAVEMENT (P-501) |
| 11-02-2020 | SG-ST | Subgrade - Stabilized | \$0.00 | 6.00 | False | 8" CEMENT TREATED SUBGRADE (P-156); |
| 11-01-2020 | SG-CO | Subgrade - Compacted | \$0.00 | 0.00 | False | EXISTING CLAY SUBGRADE |
| 06-09-2017 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-08-2017 | CS-PC | Crack Sealing - PCC | \$0.00 | 0.00 | False | - |
| 10-01-2014 | PA-PF | Patching - PCC Full Depth | \$0.00 | 0.00 | False | - |
| 06-01-1969 | NC-PC | New Construction - PCC | \$0.00 | 0.00 | True | 6" P501/ 4" P208 |

Branch - Section ID: TH01PE - 001

 LCD: 1/1/1969
 Length (ft):
 1,010.00

 Use: T-HANGAR
 Width (ft):
 20.00

 Rank: P
 True Area (sf):
 20,811.00

Surface: PCC

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|------------------------|--------|-------------------|-------------|--------------|
| 01-01-1969 | NC-PC | New Construction - PCC | \$0.00 | 0.00 | True | DATE UNKNOWN |

Branch - Section ID: TH01PE - 002

 LCD: 6/10/2017
 Length (ft):
 160.00

 Use: T-HANGAR
 Width (ft):
 15.00

 Rank: P
 True Area (sf):
 2,541.00

| Work Date | Work Code | Work Description | Cost | Thickness (in) | Major MR | Comments |
|--------------|--------------|-------------------------------|--------|----------------|-------------|----------------------|
| 06-10-2017 | CR-PC | Complete Reconstruction - PCC | \$0.00 | 6.00 | True | 6" P-501 PCC SURFACE |
| 06-09-2017 | SB-AG | Subbase - Aggregate | \$0.00 | 4.00 | False | 4" P-154 SUBBASE |
| 06-08-2017 | SG-ST | Subgrade - Stabilized | \$0.00 | 0.00 | False | STABILIZED SUBGRADE |

APPENDIX E

LOCALIZED PREVENTIVE MAINTENANCE POLICIES AND UNIT COST TABLES

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

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

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

| Soverity | | | | | | | |
|-----------------------------|-------------------|-------------------------|--|--|--|--|--|
| 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/lf |
| Joint Sealing—PCC Pavement | \$3.27/lf |
| 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 |
|--------|---------|-------------------|----------|----------------------|------------------|------------------------------|--------------|---------------------------|
| A01PE | 03 | Corner Spalling | Medium | 4 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$387 |
| A01PE | 03 | Joint Seal Damage | High | 106 | Slabs | Joint Seal (Localized) | \$3.27 | \$7,668 |
| A01PE | 03 | Joint Spalling | High | 1 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$387 |
| A01PE | 03 | LTD Cracking | Medium | 4 | Slabs | Crack Sealing - PCC | \$3.27 | \$144 |
| A01PE | 04 | Corner Spalling | Medium | 1 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$110 |
| A01PE | 04 | Joint Seal Damage | High | 60 | Slabs | Joint Seal (Localized) | \$3.27 | \$4,018 |
| A01PE | 04 | Joint Spalling | Medium | 1 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$263 |
| A01PE | 05 | Corner Break | Low | 8 | Slabs | Crack Sealing - PCC | \$3.27 | \$205 |
| R16PE | 03 | Corner Spalling | High | 5 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$510 |
| R16PE | 03 | Large Patch | Medium | 5 | Slabs | Patching - PCC Full Depth | \$18.19 | \$5,203 |
| R16PE | 03 | LTD Cracking | Medium | 19 | Slabs | Crack Sealing - PCC | \$3.27 | \$836 |
| R16PE | 06 | Joint Seal Damage | Medium | 80 | Slabs | Joint Seal (Localized) | \$3.27 | \$5,792 |
| R16PE | 07 | Corner Spalling | Medium | 2 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$217 |
| R16PE | 07 | Joint Seal Damage | Medium | 83 | Slabs | Joint Seal (Localized) | \$3.27 | \$5,877 |
| R16PE | 07 | Large Patch | Medium | 4 | Slabs | Patching - PCC Full Depth | \$18.19 | \$4,424 |
| R16PE | 07 | LTD Cracking | Medium | 2 | Slabs | Crack Sealing - PCC | \$3.27 | \$77 |
| R16PE | 07 | Small Patch | Medium | 4 | Slabs | Patching - PCC Full Depth | \$18.19 | \$194 |
| R16PE | 08 | Joint Seal Damage | Medium | 86 | Slabs | Joint Seal (Localized) | \$3.27 | \$5,698 |
| R16PE | 09 | Joint Seal Damage | High | 106 | Slabs | Joint Seal (Localized) | \$3.27 | \$7,031 |
| R16PE | 09 | Joint Spalling | Medium | 1 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$340 |
| R16PE | 10 | Joint Seal Damage | Medium | 28 | Slabs | Joint Seal (Localized) | \$3.27 | \$2,201 |
| TH01PE | 01 | ASR | Medium | 7 | Slabs | Slab Replacement - PCC | \$18.19 | \$12,338 |

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 |
|--------|---------|-------------------|----------|----------------------|------------------|------------------------------|--------------|---------------------------|
| TH01PE | 01 | Corner Break | Medium | 2 | Slabs | Patching - PCC Full Depth | \$18.19 | \$1,328 |
| TH01PE | 01 | Corner Break | High | 7 | Slabs | Patching - PCC Full Depth | \$18.19 | \$3,984 |
| TH01PE | 01 | Corner Spalling | Medium | 5 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$496 |
| TH01PE | 01 | Corner Spalling | High | 5 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$496 |
| TH01PE | 01 | Joint Seal Damage | High | 163 | Slabs | Joint Seal (Localized) | \$3.27 | \$7,936 |
| TH01PE | 01 | Joint Spalling | Medium | 2 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$595 |
| TH01PE | 01 | LTD Cracking | Medium | 11 | Slabs | Crack Sealing - PCC | \$3.27 | \$370 |
| TH01PE | 01 | Shattered Slab | Medium | 2 | Slabs | Slab Replacement - PCC | \$18.19 | \$4,113 |
| TH01PE | 01 | Small Patch | High | 2 | Slabs | Patching - PCC Full Depth | \$18.19 | \$111 |
| TH01PE | 02 | Corner Spalling | High | 1 | Slabs | Patching - PCC Partial Depth | \$40.74 | \$110 |
| TH01PE | 02 | Joint Seal Damage | High | 30 | Slabs | Joint Seal (Localized) | \$3.27 | \$1,231 |

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 Pella Municipal Airport.



PREPARED FOR

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