

DAVENPORT MUNICIPAL AIRPORT PAVEMENT MANAGEMENT REPORT



Prepared For:
Iowa Department of Transportation
Office of Aviation

Prepared By:
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DAVENPORT MUNICIPAL AIRPORT PAVEMENT MANAGEMENT REPORT

PREPARED FOR:

**IOWA DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION**

PREPARED BY:

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IN ASSOCIATION WITH:

ROBINSON ENGINEERING COMPANY

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TABLE OF CONTENTS

INTRODUCTION.....	1
PAVEMENT INVENTORY.....	2
PAVEMENT EVALUATION.....	4
Pavement Evaluation Procedure.....	4
Pavement Evaluation Results.....	5
Inspection Comments.....	12
Runways.....	12
Taxiways.....	12
Aprons.....	13
PAVEMENT MAINTENANCE AND REHABILITATION PROGRAM.....	15
Analysis Parameters.....	15
Localized Preventive Maintenance Policies and Unit Costs.....	15
Major Rehabilitation Unit Costs.....	15
Budget and Inflation Rate.....	15
Analysis Approach.....	15
Analysis Results.....	16
General Maintenance Recommendations.....	17
FAA Requirements (Public Law 103-305).....	17
SUMMARY.....	25

LIST OF FIGURES

Figure 1. Pavement condition versus cost of repair.....	1
Figure 2. Pavement inventory.....	2
Figure 3. Davenport Municipal Airport network definition map.....	3
Figure 4. Visual representation of PCI scale.....	4
Figure 5. PCI versus repair type.....	5
Figure 6. Overall condition at Davenport Municipal Airport.....	6
Figure 7. Condition by branch use at Davenport Municipal Airport.....	7
Figure 8. Davenport Municipal Airport PCI map.....	8

LIST OF TABLES

Table 1. Pavement evaluation results.....	9
Table 2. 5-year M&R program under an unlimited funding analysis scenario.....	16
Table 3. Pavement inspection report.....	20

APPENDIXES

Appendix A. Cause of Distress Tables.....	A-1
Appendix B. Inspection Photographs.....	B-1
Appendix C. Inspection Report.....	C-1
Appendix D. Work History Report.....	D-1
Appendix E. Localized Preventative Maintenance Policies and Unit Cost Tables.....	E-1
Appendix F. Year 2016 Localized Preventive Maintenance Details.....	F-1

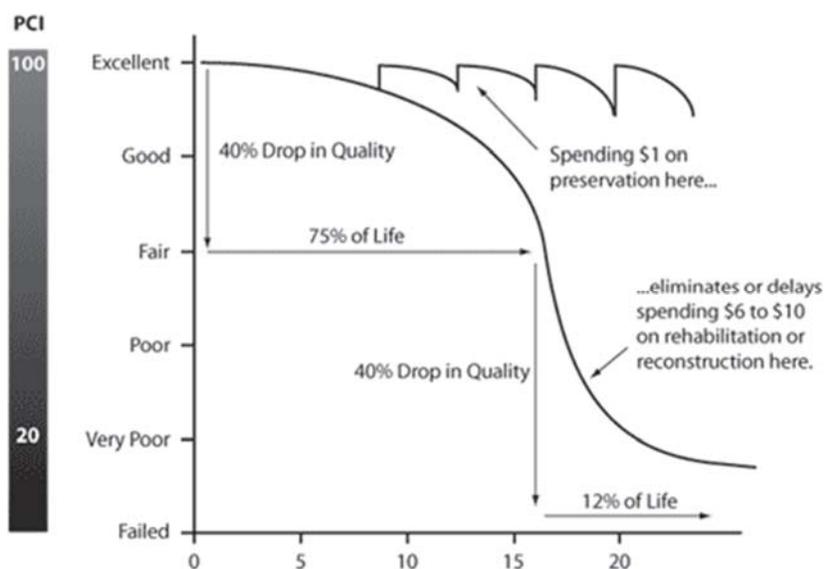
INTRODUCTION

Applied Pavement Technology, Inc. (APTech), with assistance from Robinson Engineering Company, updated the airport pavement management system (APMS) for the Iowa Department of Transportation, Office of Aviation (Iowa DOT). During this project, pavement conditions at Davenport Municipal Airport were assessed in November 2015 using the Pavement Condition Index (PCI) procedure.

During a PCI inspection, the types, severities, and amounts of distress present in a pavement are quantified. This information is then used to develop a composite index that represents the overall condition of the pavement in numerical terms, ranging from 0 (failed) to 100 (excellent). The PCI provides an overall measure of condition and an indication of the level of work that will be required to maintain or repair a pavement. The distress information also provides insight into what is causing the pavement to deteriorate, which is the first step in selecting the appropriate repair action to correct the problem.

Programmed into an APMS, PCI information is used to determine when preventive maintenance actions (such as crack or joint sealing) are advisable, and also to identify the most cost-effective time to perform major rehabilitation (such as an overlay or whitetopping). The importance of identifying not only the type of repair, but also the optimal time of repair is illustrated in Figure 1 (taken from <http://www.fhwa.dot.gov/pavement/preservation/ppc0621.cfm>). This figure shows that there is a point in a pavement's life cycle where the rate of deterioration increases. The financial impact of delaying repairs beyond this point can be severe.

Figure 1. Pavement condition versus cost of repair.

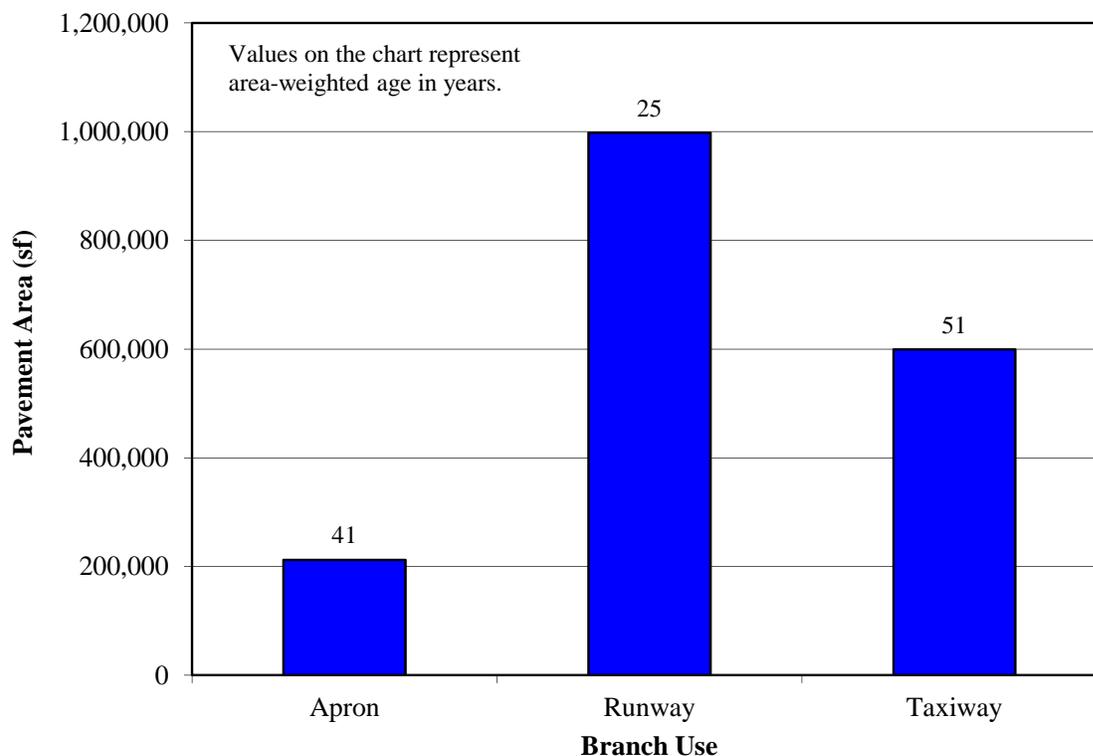


The pavement evaluation results for Davenport Municipal Airport are presented within this report and can be used by the Iowa DOT, the Federal Aviation Administration (FAA), and Davenport Municipal Airport to prioritize and schedule pavement maintenance and rehabilitation (M&R) actions at the airport. In addition to this report, the web-based Interactive Data Exchange Application (IDEA) containing the pavement management information collected during this project was updated, and may be accessed from Iowa DOT's website.

PAVEMENT INVENTORY

Approximately 1,808,630 square feet of runway, taxiway, and apron pavements were evaluated at Davenport Municipal Airport, as illustrated in Figure 2. This figure also shows the area-weighted age in years of the pavements.

Figure 2. Pavement inventory.

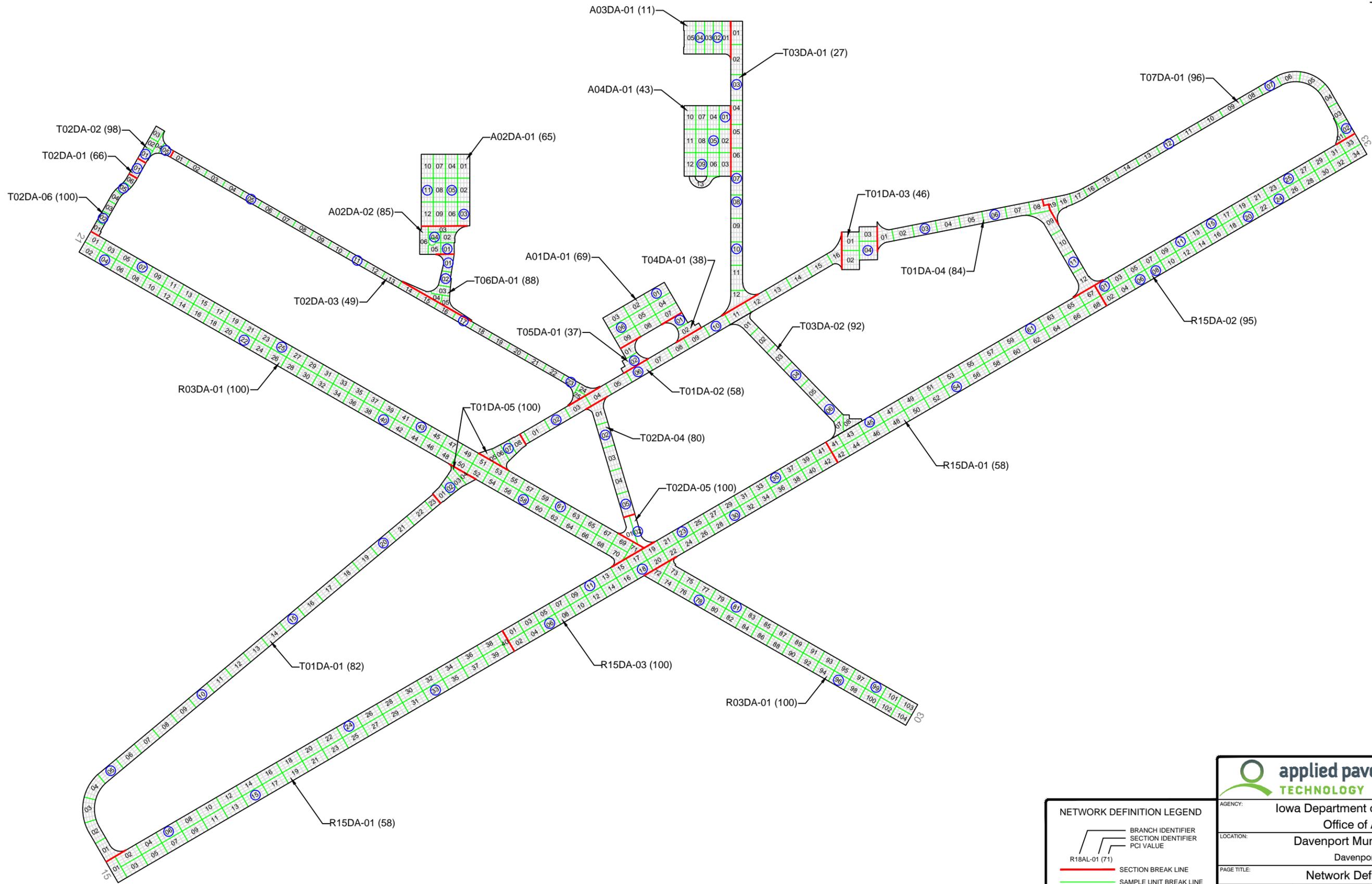


The pavement network at Davenport Municipal Airport was divided into branches, sections, and sample units for pavement management purposes. A branch is a single entity that serves a distinct function. For example, a runway is considered a branch because it serves a single function (allowing aircraft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

Each branch was further divided into sections. Sections are defined as parts of the branch that share common attributes, such as cross-section, last construction date, traffic level, and performance. Using this traditional approach, if a runway was built in 1968 and then extended in 1984, it would be comprised of 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 pavement inspections, and the collected information was extrapolated to predict the condition of the section as a whole. 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 Davenport Municipal Airport.

FIGURE 3. NETWORK DEFINITION MAP.



NETWORK DEFINITION LEGEND

	BRANCH IDENTIFIER
	SECTION IDENTIFIER
	PCI VALUE
	SECTION BREAK LINE
	SAMPLE UNIT BREAK LINE
	SLAB JOINT
	SAMPLE UNIT NUMBER
	SAMPLE UNIT INSPECTED
	ADDITIONAL SAMPLE UNIT

AGENCY: Iowa Department of Transportation Office of Aviation			
LOCATION: Davenport Municipal Airport Davenport, Iowa			
PAGE TITLE: Network Definition Map			
PROJECT DATE: OCT. 2015	CREATION DATE: OCT. 2015	PROJECT MANAGER: LJR	JOB NUMBER: 2012-001-AM04
DRAWING SCALE: 1 = 400'	LAST MODIFIED DATE: DEC. 2015	REVISED BY: KEW	DRAWN BY: DSP
FILENAME: Davenport.dwg		LAYOUT NAME/NUMBER: NET. DEF.	PAGE NUMBER: 3

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PAVEMENT EVALUATION

Pavement Evaluation Procedure

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

- FAA Advisory Circular (AC) 150/5380-6C, *Guidelines and Procedures for Maintenance of Airport Pavements* (http://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5380-6C.pdf)
- FAA AC 150/5380-7B, *Airport Pavement Management Program (PMP)* (http://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5380-7B.pdf)
- ASTM D5340-12, *Standard Test Method for Airport Pavement Condition Index Surveys*

The PCI provides a numerical indication of overall pavement condition, as illustrated in Figure 4. The types and amounts of deterioration are used to calculate the PCI of the section. The PCI scale ranges from a value of 0 (representing a pavement in a failed condition) to a value of 100 (representing a pavement in excellent condition).

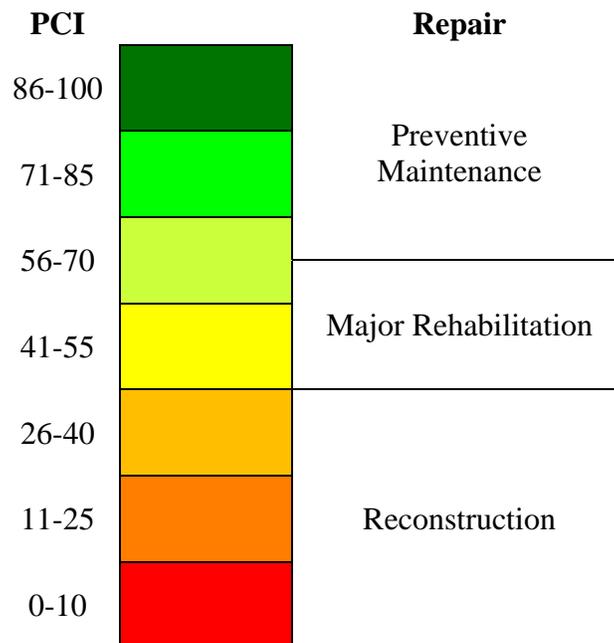
Figure 4. Visual representation of PCI scale.

Typical Pavement Surface ¹	PCI
	100
	60
	15

¹Photographs shown are not specific to Davenport Municipal Airport.

In general terms, 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.

Figure 5. PCI versus repair type.



The types of distress identified during the PCI inspection provide insight into the cause of pavement deterioration. PCI distress types are characterized as load-related (such as alligator cracking on asphalt-surfaced pavements or shattered slabs on portland cement concrete [PCC] pavements), climate/durability-related (such as weathering [a climate-related distress type on asphalt-surfaced pavements] and durability cracking [a durability-related distress type on PCC pavements]), and other (distress types that cannot be attributed solely to load or climate/durability). Understanding the cause of distress helps in selecting a rehabilitation alternative that corrects the cause and thus eliminates its recurrence.

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 Davenport Municipal Airport were inspected on November 2-3, 2015. The 2015 area-weighted condition of Davenport Municipal Airport is 77, with conditions ranging from 11 to 100 (on a scale of 0 [failed] to 100 [excellent]). During the previous pavement inspection in 2011, the area-weighted PCI of the airport was 73.

Figure 6 summarizes the overall condition of the pavements at Davenport 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 distresses observed during the visual survey. Appendix D includes detailed work history information that was collected during the record review process.

Figure 6. Overall condition at Davenport Municipal Airport.

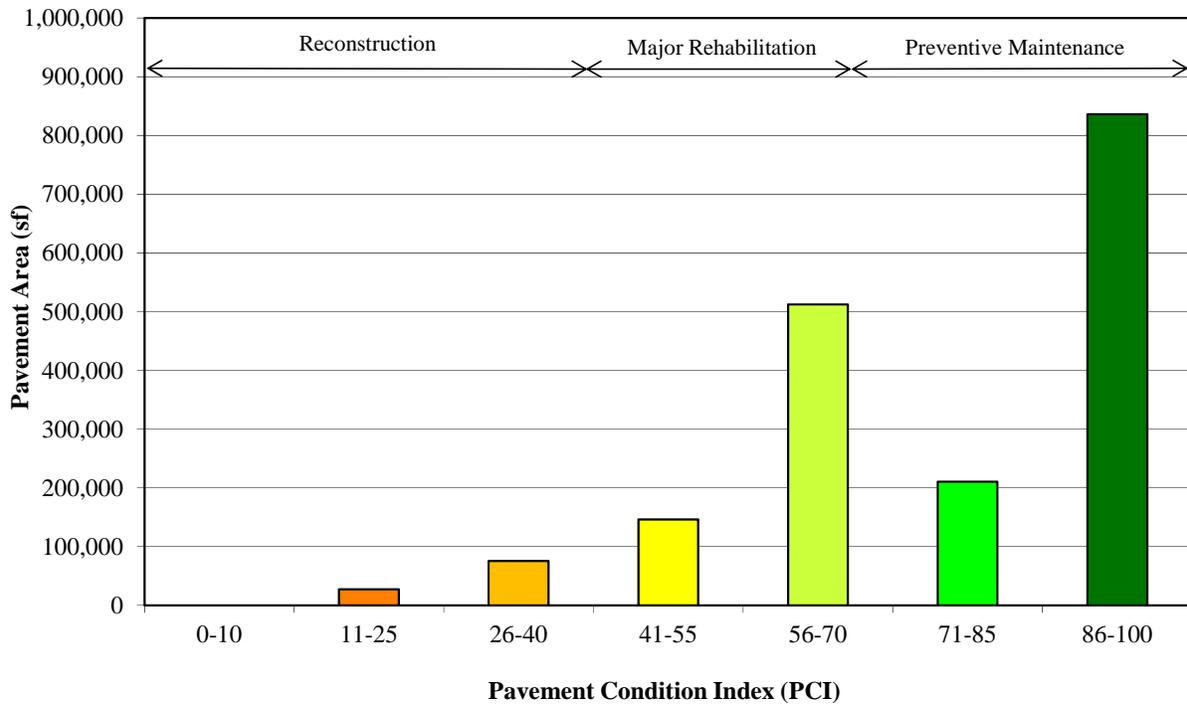


Figure 7. Condition by branch use at Davenport Municipal Airport.

(Values on chart are area-weighted)

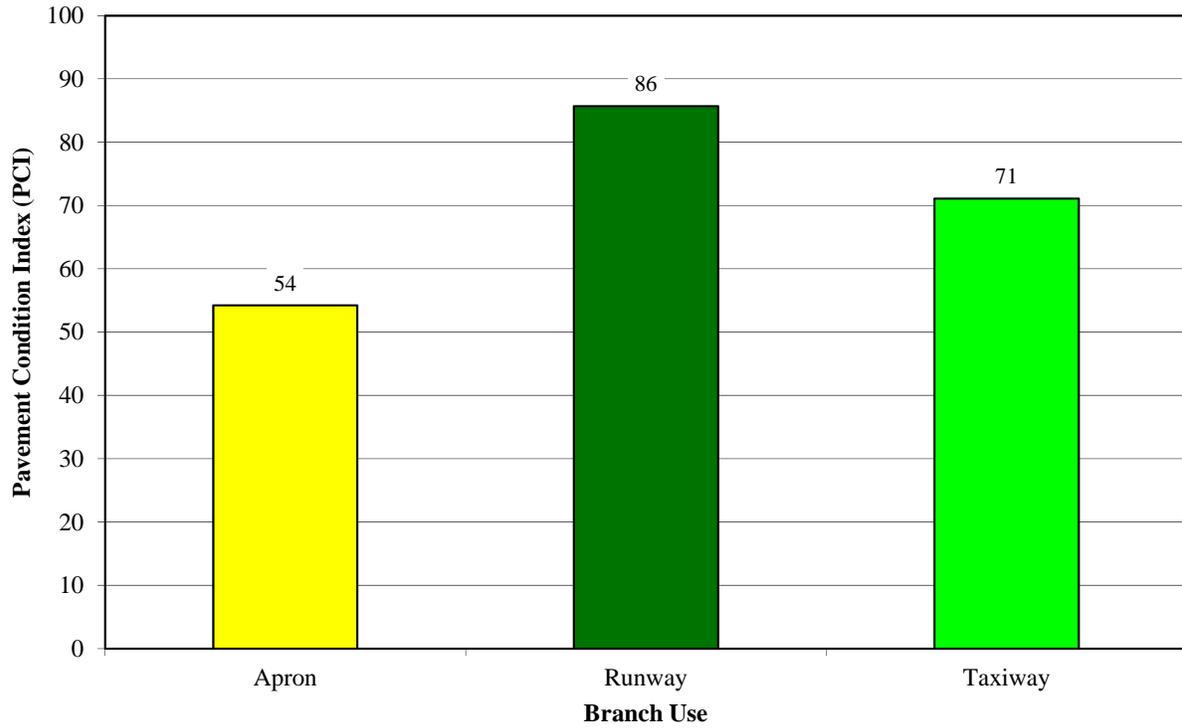


FIGURE 8. PCI MAP.



LEGEND

 BRANCH IDENTIFIER
 SECTION IDENTIFIER
 SECTION BREAK LINE

PAVEMENT CONDITION INDEX

PCI	REPAIR
100	
85	PREVENTIVE MAINTENANCE
70	
55	MAJOR REHABILITATION
40	
25	
10	RECONSTRUCTION
0	

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AGENCY: Iowa Department of Transportation Office of Aviation			
LOCATION: Davenport Municipal Airport Davenport, Iowa			
PAGE TITLE: 2015 Pavement Condition Index Map			
PROJECT DATE: OCT. 2015	CREATION DATE: OCT. 2015	PROJECT MANAGER: LJR	JOB NUMBER: 2012-001-AM04
DRAWING SCALE: 1"=400'	LAST MODIFIED DATE: DEC. 2015	REVISED BY: KEW	DRAWN BY: DSP
FILENAME: Davenport.dwg		LAYOUT NAME/NUMBER: PCI	PAGE NUMBER: 8

Table 1. Pavement evaluation results.

Davenport Municipal Airport								
Branch ¹	Section ¹	Surface Type ²	Section Area (sf)	LCD ³	2015 PCI	% Distress Due to:		Distress Types ⁶
						Load ⁴	Climate or Durability ⁵	
A01DA	01	PCC	44,052	6/1/1948	69	44	28	ASR, Corner Spalling, Joint Seal Damage, Joint Spalling, LTD Cracking, Shrinkage Cracking, Small Patch
A02DA	01	PCC	61,421	6/1/2001	65	30	23	ASR, Corner Break, Joint Seal Damage, Joint Spalling, LTD Cracking, Small Patch
	02	PCC	18,018	8/1/1996	85	0	77	Corner Spalling, Joint Seal Damage, Joint Spalling
A03DA	01	PCC	27,299	6/1/1963	11	72	7	Corner Spalling, Faulting, Joint Seal Damage, Joint Spalling, LTD Cracking, Shattered Slab, Shrinkage Cracking
A04DA	01	PCC	60,957	6/1/1963	43	77	15	Corner Break, Corner Spalling, Joint Seal Damage, Joint Spalling, LTD Cracking, Shattered Slab
R03DA	01	PCC	389,303	6/3/2015	100	0	0	No Distress
R15DA	01	PCC	324,860	6/1/1947	58	5	11	ASR, Corner Spalling, Joint Seal Damage, Large Patch/Utility, LTD Cracking, Popouts, Scaling, Small Patch
	02	PCC	126,500	6/30/1994	95	0	93	Joint Seal Damage, Joint Spalling, Small Patch
	03	PCC	157,200	6/3/2015	100	0	0	No Distress
T01DA	01	PCC	109,694	6/1/1947	82	0	29	ASR, Corner Spalling, Joint Seal Damage, Joint Spalling, Large Patch/Utility, Scaling, Shrinkage Cracking, Small Patch

Table 1. Pavement evaluation results (continued).

Davenport Municipal Airport								
Branch ¹	Section ¹	Surface Type ²	Section Area (sf)	LCD ³	2015 PCI	% Distress Due to:		Distress Types ⁶
						Load ⁴	Climate or Durability ⁵	
T01DA	02	PCC	79,161	6/1/1947	58	3	12	ASR, Corner Spalling, Faulting, Joint Seal Damage, Joint Spalling, Large Patch/Utility, LTD Cracking, Shrinkage Cracking, Small Patch
	03	PCC	22,199	6/1/1947	46	27	8	ASR, Corner Spalling, Joint Seal Damage, Joint Spalling, Large Patch/Utility, LTD Cracking, Small Patch
	04	PCC	57,892	6/1/1947	84	39	9	Corner Break, Corner Spalling, Joint Seal Damage, Joint Spalling, LTD Cracking, Shrinkage Cracking, Small Patch
	05	PCC	23,502	6/3/2015	100	0	0	No Distress
T02DA	01	PCC	2,941	6/1/1979	66	41	25	ASR, Corner Break, Joint Seal Damage, LTD Cracking
	02	PCC	10,040	1/1/2005	98	0	100	Joint Seal Damage
	03	PCC	63,040	6/1/1979	49	69	24	ASR, Corner Break, Corner Spalling, Joint Seal Damage, Joint Spalling, LTD Cracking, Shattered Slab, Shrinkage Cracking, Small Patch
	04	PCC	25,205	6/1/1947	80	0	34	ASR, Corner Spalling, Joint Seal Damage, Joint Spalling, Scaling
	05	APC	7,804	6/1/2015	100	0	0	No Distress
	06	PCC	10,533	6/3/2015	100	0	0	No Distress
T03DA	01	PCC	61,083	6/1/1963	27	80	11	Corner Spalling, Durability Cracking, Joint Seal Damage, Joint Spalling, LTD Cracking, Shattered Slab, Shrinkage Cracking

Table 1. Pavement evaluation results (continued).

Davenport Municipal Airport								
Branch ¹	Section ¹	Surface Type ²	Section Area (sf)	LCD ³	2015 PCI	% Distress Due to:		Distress Types ⁶
						Load ⁴	Climate or Durability ⁵	
T03DA	02	PCC	34,671	6/1/1947	92	0	0	ASR, Corner Spalling, Joint Spalling
T04DA	01	PCC	7,172	6/1/1948	38	59	7	ASR, Joint Seal Damage, Joint Spalling, Large Patch/Utility, LTD Cracking, Shattered Slab, Shrinkage Cracking, Small Patch
T05DA	01	PCC	7,260	6/1/1948	37	58	12	ASR, Corner Break, Joint Seal Damage, Large Patch/Utility, LTD Cracking, Small Patch
T06DA	01	PCC	13,979	8/1/1996	88	0	100	Joint Seal Damage
T07DA	01	PCC	62,844	6/30/1994	96	0	0	Faulting, Joint Spalling

¹See Figure 3 for the location of the branch and section.

²AC = asphalt cement concrete; AAC = asphalt overlay on AC; PCC = portland cement concrete; APC = asphalt overlay on PCC.

³LCD = last construction date.

⁴Distress due to load includes those distresses attributed to a structural deficiency in the pavement, such as alligator cracking or rutting on asphalt-surfaced pavements or shattered slabs on PCC pavements.

⁵Distress due to climate or durability includes those distresses attributed to either the aging of the pavement and the effects of the environment (such as weathering, raveling, or block cracking in asphalt-surfaced pavements) or to a materials-related problem (such as durability cracking or alkali-silica reaction [ASR] in a PCC pavement). If materials-related distresses were recorded during the inspection, further laboratory testing is required to definitively determine the type present.

⁶L&T Cracking = Longitudinal and Transverse Cracking; LTD Cracking = Longitudinal, Transverse, and Diagonal Cracking; ASR = Alkali-Silica Reaction.

Inspection Comments

Davenport Municipal Airport was inspected on November 2-3, 2015. There were twenty-six pavement sections defined during the inspection. In several pavement areas alkali-silica reaction (ASR) was recorded according to ASTM D5340. It should be noted that laboratory testing and analysis is the only definitive way to validate the presence of ASR.

Runways

Runway 15-33 was defined by three sections. Section 01, the majority of the runway, had medium-severity joint seal damage recorded throughout. In addition, moderate amounts of all severities of ASR, low- and high-severity small patching, and popouts were identified. Small quantities of low-severity longitudinal, transverse, and diagonal (LTD) cracking and large patching; low- and medium-severity corner spalling; and medium-severity scaling were also observed. Section 02, the runway extension located at the Runway 33 approach, had low- and medium-severity joint seal damage recorded throughout along with isolated amounts of low-severity joint spalling and small patching. Section 03, located at the intersection of the runway with Runway 3-21, was recently reconstructed and was in excellent condition with no distresses identified at the time of inspection.

Runway 03-21 consisted of one section that was recently reconstructed and in excellent condition with no distresses observed at the time of inspection.

Taxiways

Taxiway 01, a parallel taxiway to Runway 15-33, was defined by five sections. Section 01, located between the Runway 15 approach and Runway 03-21, had medium-severity joint seal damage recorded throughout. Smaller amounts of low- and medium-severity large patching and corner spalling, low-severity ASR, medium-severity joint spalling and scaling, high-severity small patching, and shrinkage cracking were also identified. Section 02, located south of Runway 03-21, had medium-severity joint seal damage observed. Moderate quantities of all severities of ASR; low- and medium-severity joint spalling; low-severity LTD cracking, faulting, and large patching; medium-severity small patching and corner spalling; and shrinkage cracking were also noted. Section 03 consisted of an old crosswind runway pavement that had medium-severity joint seal damage and extensive amounts of low- and medium-severity LTD cracking, small patching, large patching, and corner spalling; low-severity ASR; and medium-severity joint spalling recorded. Section 04, located towards the southern end of the taxiway, had low-severity joint seal damage identified along with moderate amounts of low- and medium-severity small patching and small quantities of low-severity joint and corner spalling, LTD cracking, corner breaks, and shrinkage cracking. Section 05, located adjacent to Runway 3-21, was recently reconstructed and was in excellent condition with no distresses identified at the time of inspection.

Taxiway 02, a partial parallel taxiway to Runway 03-21, consisted of six sections. Section 01, located near the Runway 21 approach, had high-severity joint seal damage recorded throughout along with extensive amounts of low-severity ASR. Isolated quantities of low- and medium-severity corner breaks and medium-severity LTD cracking were also identified. Section 02, also located near the Runway 21 approach, was in excellent condition with only low-severity joint seal damage recorded. Section 03 comprised the majority of the taxiway with medium- and high-severity joint seal damage and extensive amounts of low- and medium-severity LTD cracking identified. Additionally, small quantities of low-severity joint spalling, corner spalling,

ASR, shattered slabs, and corner breaks; high-severity small patching; and shrinkage cracking were noted. Section 04, located between Taxiway 01 and Runway 15-33, had medium-severity joint seal damage recorded throughout. In addition, small amounts of low- and medium-severity joint spalling and corner spalling, low-severity ASR, and medium-severity scaling were observed. Section 05, located adjacent to the intersection of the two runways, and Section 06, located at the Runway 21 approach, were recently rehabilitated and were in excellent condition with no distresses identified at the time of inspection.

Taxiway 03 connected Apron 03 with Runway 15-33 and contained two sections. Section 01, located adjacent to the apron, was in poor condition with high-severity joint seal damage observed throughout. Moderate amounts of low- and medium-severity LTD cracking, all severities of shattered slabs, medium-severity joint spalling, low- and medium-severity corner spalling, low-severity durability cracking, and shrinkage cracking were also identified. Section 02, located between Runway 15-33 and Taxiway 01, only had small amounts of low-severity ASR, joint spalling, and corner spalling recorded.

Taxiway 04 consisted of one section that connected the main apron with Taxiway 01 and had medium-severity joint seal damage identified throughout. Moderate amounts of low- and medium-severity LTD cracking and low-severity ASR were observed. In addition, small quantities of low-severity small patching, large patching, and shattered slabs; medium-severity joint spalling; and shrinkage cracking were noted.

Taxiway 05 also connected the main apron with Taxiway 01 and was defined by one section with high-severity joint seal observed. Moderate amounts of low- and medium-severity LTD cracking along with small quantities of low-severity small and large patching, medium-severity corner breaks, and low- and medium-severity ASR were also identified.

Taxiway 06 connected Apron 02 with Taxiway 02 and contained one section. Only high-severity joint seal damage was recorded on this taxiway.

Taxiway 07, located near the Runway 33 approach, was defined by one section in excellent condition with isolated amounts of low-severity faulting and medium-severity joint spalling identified. The joints were recently resealed on this taxiway.

Aprons

The main apron area, Apron 01, was defined by one section with high-severity joint seal damage recorded throughout. Additionally, small amounts of low- and medium-severity LTD cracking and joint spalling, medium-severity small patching, low-severity corner spalling and ASR, and shrinkage cracking were noted.

Apron 02 was located north of the main apron area near Taxiway 02 and contained two sections. Section 01, the majority of this apron area, had high-severity joint seal damage observed. Moderate amounts of low- and medium-severity LTD cracking and small quantities of medium-severity small patching and corner breaks and low- and medium-severity joint spalling and ASR were noted. Section 02, located adjacent to Taxiway 06, had high-severity joint seal damage recorded throughout along with isolated quantities of medium-severity joint spalling and low-severity corner spalling.

Apron 03, located on the east end of Taxiway 03, was defined by one section in poor condition. High-severity joint seal damage was observed along with extensive amounts of low- and medium-severity LTD cracking and corner spalling, all severities of shattered slabs, low-severity faulting, medium-severity joint spalling, and shrinkage cracking.

Apron 04 was located along Taxiway 03 and consisted of one section with high-severity joint seal damage identified. Extensive amounts of low- and medium-severity LTD cracking were recorded. In addition, small amounts of low- and medium-severity joint spalling and corner spalling and low-severity corner breaks and shattered slabs were noted.

PAVEMENT MAINTENANCE AND REHABILITATION PROGRAM

Using the information collected during the pavement inspection, a 5-year M&R program was developed for Davenport Municipal Airport. In addition, a 1-year plan for localized preventive maintenance (such as crack sealing and patching) was prepared. The PAVER™ pavement management software was used to perform this analysis.

Analysis Parameters

Localized Preventive Maintenance Policies and Unit Costs

Localized preventive maintenance policies were developed for asphalt-surfaced and PCC pavements. These policies, shown in Appendix E, identify the localized preventive maintenance actions that the Iowa DOT considered appropriate to correct different distress types and severities. The Iowa DOT provided unit costs for each of the localized preventive maintenance actions included in these policies, and these costs are detailed in Appendix E. Please note that this information is of a general nature for the entire state. The maintenance policies and unit costs may require adjustment to reflect specific conditions at Davenport Municipal Airport.

Major Rehabilitation Unit Costs

PAVER™ estimates the cost of major rehabilitation based on the predicted PCI of the pavement section. The Iowa DOT provided these costs, 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 more accurately estimate the cost of such work.

Budget and Inflation Rate

An unlimited budget with a start date of July 1, 2016 and an inflation rate of 2.5 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. The Iowa DOT set the critical PCI at 65 for runways, 60 for taxiways, and 55 for aprons. During this analysis, major rehabilitation was recommended for pavements in the year they dropped below their critical PCI.

For the first year (2016) 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 2017 or 2018, then localized maintenance was not recommended for 2016. While localized preventive maintenance should be an annual undertaking at Davenport 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 2016 localized preventive maintenance plan as a baseline for that work. As the pavements age, it can be assumed that the amount of localized maintenance required will increase.

Analysis Results

A summary of the M&R program for Davenport Municipal Airport is presented in Table 2. Detailed information on the recommended localized preventive maintenance plan for 2016 is contained in Appendix F.

Table 2. 5-year M&R program under an unlimited funding analysis scenario.

Year	Branch ¹	Section ¹	Surface Type ²	Type of Repair ³	Estimated Cost ⁴
2016	A01DA	01	PCC	Localized Maintenance	\$16,617
	A02DA	01	PCC	Localized Maintenance	\$69,621
		02	PCC	Localized Maintenance	\$9,220
	A03DA	01	PCC	Major Rehabilitation	\$433,235
	A04DA	01	PCC	Major Rehabilitation	\$854,121
	R15DA	01	PCC	Major Rehabilitation	\$2,436,449
		02	PCC	Localized Maintenance	\$18,025
	T01DA	01	PCC	Localized Maintenance	\$50,979
		02	PCC	Major Rehabilitation	\$593,707
		03	PCC	Major Rehabilitation	\$249,362
		04	PCC	Localized Maintenance	\$553
	T02DA	01	PCC	Major Rehabilitation	\$22,057
		03	PCC	Major Rehabilitation	\$549,836
		04	PCC	Localized Maintenance	\$12,606
	T03DA	01	PCC	Major Rehabilitation	\$969,387
	T04DA	01	PCC	Major Rehabilitation	\$113,820
T05DA	01	PCC	Major Rehabilitation	\$115,216	
T06DA	01	PCC	Localized Maintenance	\$2,935	
T07DA	01	PCC	Localized Maintenance	\$1,058	
Total:					\$6,518,805

¹See Figure 3 for the location of the branch and section.

²AC = asphalt cement concrete; AAC = asphalt overlay on AC; PCC = portland cement concrete; APC = asphalt overlay on PCC.

³Major Rehabilitation: such as pavement reconstruction or an overlay. Localized Maintenance: such as crack sealing or patching.

⁴Cost estimates are based on broad statewide numbers and should be adjusted to reflect local costs.

The recommendations made in this report are based on a broad network level analysis and are meant to provide Davenport 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 Davenport Municipal Airport should adjust the plan to reflect local costs.

Because an unlimited budget was used in the analysis, the pavement repair program may need to be adjusted to take into account economic and/or operational constraints. Identifying 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, Davenport 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 are considered for prolonging pavement life:

1. Regularly inspect all safety areas of the airport, and document all inspection activity. A sample form that can be used to perform these inspections is provided in Table 3 of this report.
2. Provide a method of tracking all maintenance activities that occur as a result of inspections. These need to be reported to the FAA and Iowa DOT. This is important because 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/or mowing programs for the safety areas. Vegetation growth in pavement cracks is very destructive and significantly increases the rate of pavement deterioration.
4. Implement a periodic crack and joint sealing program. Keeping water and debris out of the pavement system by sealing cracks and joints is a proven and cost-effective method of extending the life of the pavement system.
5. Ensure that dirt does not build up along the edges of the pavements. This can create a “bathtub” effect, reducing the ability of water to drain away from the pavement system.
6. Closely monitor the movement of heavy equipment (particularly farming, construction, and fueling equipment) to make sure it is only operating on pavements that are designed to accommodate heavy loads. Failure to restrict heavy equipment to appropriate areas may result in the premature failure of airport pavements.

FAA Requirements (Public Law 103-305)

Since Davenport 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, the airport will also need to undertake monthly drive-by inspections of pavement conditions and track pavement-related maintenance activities.

FAA AC 150/5380-6C and FAA AC 150/5380-7B provide detailed guidance pertaining to the requirements for an acceptable pavement management program. Appendix A of FAA AC 150/5380-7B outlines what needs to be included in a pavement management program (PMP) to remain in compliance with this law and Grant Assurance #11. Following is a copy of this Appendix, along with instructions for supplementing this report so that all requirements are met. **Note that the italicized words are direct quotations from the FAA AC.**

FAA AC 150/5830-7B, Appendix A. Pavement Management Program (PMP)

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

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

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

The network definition map provided in Figure 3 of this report shows the location of all runways, taxiways, and aprons at Davenport Municipal Airport. If any new pavements are constructed or any pavement areas are permanently closed, this map must be updated. Maps can be updated by submitting the project plans to the Iowa DOT after project completion.

- b. *Dimensions of pavement sections.*

The dimensions of all runways, taxiways, and aprons are stored in the PAVER™ database. Appendix C provides information on length, width, and area. In addition, the network definition map (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 the airport is listed in Table 1 of this report and is also stored in the PAVER™ database. Any changes to pavement type (through an overlay or reconstruction) must be recorded.

- d. *Year of construction and/or most recent major rehabilitation.*

Dates for pavement construction, rehabilitation, or reconstruction must be recorded.

- 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 a monthly drive-by inspection. A sample pavement inspection report form is provided in Table 3 of this report.

A-1.3. Record Keeping. The airport must record and keep on file complete information about all detailed inspections and maintenance performed until the pavement system is replaced. The types of distress, their locations, and remedial action, scheduled or performed, must be documented. The minimum information recorded includes:

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

Items a through c are satisfied by this inspection report. Item d is the responsibility of the airport, as is record keeping of the monthly drive-by inspections.

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

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

Table 3. Pavement inspection report.

Inspected By: _____
 Date Inspected: _____

Inspection Record			Maintenance Action			
Location ¹		Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
Branch	Section					
A01DA	01					
A02DA	01					
	02					
A03DA	01					
A04DA	01					
R03DA	01					

Table 3. Pavement inspection report (continued).

Inspected By: _____
 Date Inspected: _____

Inspection Record			Maintenance Action			
Location ¹		Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
Branch	Section					
R15DA	01					
	02					
	03					
T01DA	01					
	02					
	03					

Table 3. Pavement inspection report (continued).

Inspected By: _____
 Date Inspected: _____

Inspection Record			Maintenance Action			
Location ¹		Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
Branch	Section					
T01DA	04					
	05					
T02DA	01					
	02					
	03					
	04					

Table 3. Pavement inspection report (continued).

Inspected By: _____

Date Inspected: _____

Inspection Record			Maintenance Action			
Location ¹		Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
Branch	Section					
T02DA	05					
	06					
T03DA	01					
	02					
T04DA	01					
T05DA	01					

Table 3. Pavement inspection report (continued).

Inspected By: _____

Date Inspected: _____

Inspection Record			Maintenance Action			
Location ¹		Distress Description/Dimensions/Severity/ Recommended Action	Description of Repair	Date Performed	Cost	Funding Source
Branch	Section					
T06DA	01					
T07DA	01					

¹See Figure 3 for the location of the branch and section.

SUMMARY

This report documents the results of the pavement evaluation conducted at Davenport Municipal Airport. During a visual inspection of the pavements in 2015, it was found that the overall condition of the pavement network is a PCI of 77. A 5-year pavement repair program, shown in Table 2, was generated for Davenport Municipal Airport, which revealed that approximately \$6,519,000 needs to be expended on M&R. Davenport Municipal Airport should utilize these study results to assist in planning for future maintenance needs as part of the airport CIP planning process.

APPENDIX A

CAUSE OF DISTRESS TABLES

Table A-1. Cause of pavement distress, asphalt-surfaced pavements.

Distress Type	Probable Cause of Distress
Alligator Cracking	Fatigue failure of the asphalt concrete surface under repeated traffic loading.
Bleeding	Excessive amounts of asphalt cement or tars in the mix and/or low air void content.
Block Cracking	Shrinkage of the asphalt concrete 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 concrete 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 Spill Damage	Deterioration or softening of the pavement surface caused by the spilling of oil, fuel, or other solvents.
Patching	N/A
Polished Aggregate	Repeated traffic applications.
Raveling	Asphalt binder may have hardened significantly, causing coarse aggregate pieces to dislodge.
Rutting	Usually caused by consolidation or lateral movement of the materials due to traffic loads.
Shoving	Where PCC pavements adjoin flexible pavements, PCC “growth” may shove the asphalt pavement.
Slippage Cracking	Low strength surface mix or poor bond between the surface and the next layer of the pavement structure.
Swelling	Usually caused by frost action or by swelling soil.
Weathering	Asphalt binder and/or fine aggregate may wear away as the pavement ages and hardens.

Table A-2. Cause of pavement distress, PCC pavements.

Distress Type	Probable Cause of Distress
ASR	Chemical reaction of alkalis in the portland cement with certain reactive silica minerals. ASR may be accelerated by the use of chemical pavement deicers.
Blow-Up	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.
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.
Settlement	Upheaval or consolidation.
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



A01DA-01. Overview.



A01DA-01. Joint Spalling (Sample Unit No. 01).



A02DA-01. Overview.



A02DA-01. ASR (Sample Unit No. 03).



A02DA-01. ASR (Sample Unit No. 05).



A02DA-02. Overview.



A02DA-02. Joint Spalling (Sample Unit No. 04).



A03DA-01. Overview.



A03DA-01. LTD Cracking (Sample Unit No. 02).



A03DA-01. Shattered Slab (Sample Unit No. 02).



A04DA-01. Overview.



A04DA-01. LTD Cracking (Sample Unit No. 01).



R03DA-01. Overview.



R15DA-01. Overview.



R15DA-01. ASR (Sample Unit No. 15).



R15DA-01. ASR (Sample Unit No. 54).



R15DA-01. Popouts (Sample Unit No. 68).



R15DA-01. Small Patch (Sample Unit No. 24).



R15DA-02. Overview.



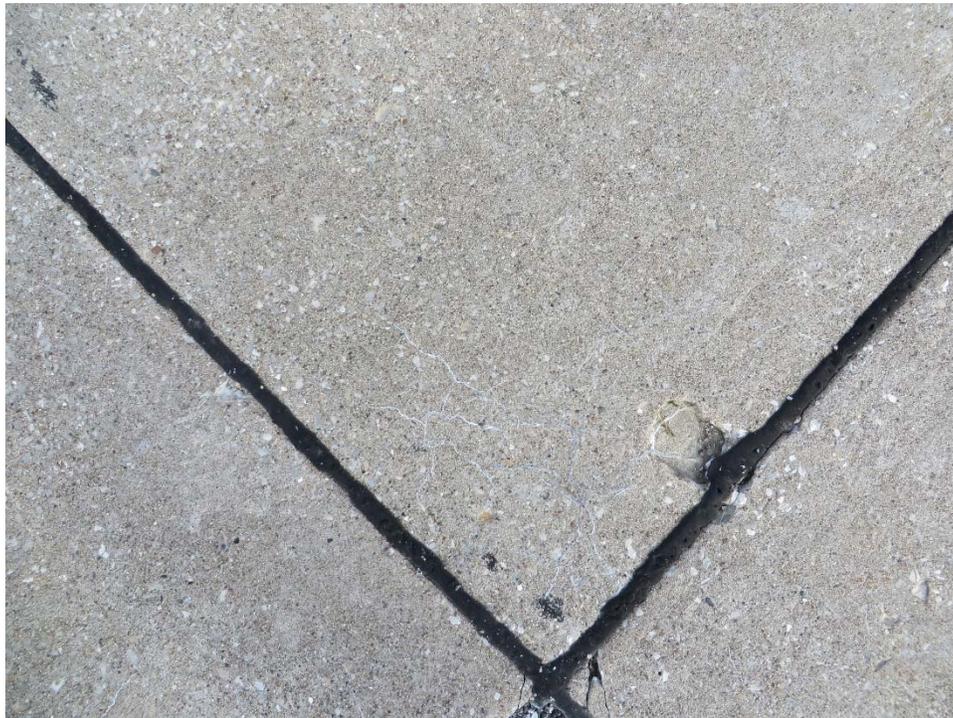
R15DA-02. Joint Spalling (Sample Unit No. 25).



R15DA-03. Overview.



T01DA-01. Overview.



T01DA-01. ASR (Sample Unit No. 05).



T01DA-01. Joint Seal Damage (Sample Unit No. 15).



T01DA-02. Overview.



T01DA-02. ASR (Sample Unit No. 10).



T01DA-02. ASR (Sample Unit No. 10).



T01DA-03. Overview.



T01DA-03. ASR (Sample Unit No. 04).



T01DA-03. Small Patching (Sample Unit No. 04).



T01DA-04. Overview.



T01DA-04. Joint Spalling (Sample Unit No. 11).



T01DA-04. LTD Cracking (Sample Unit No. 11).



T01DA-05. Overview.



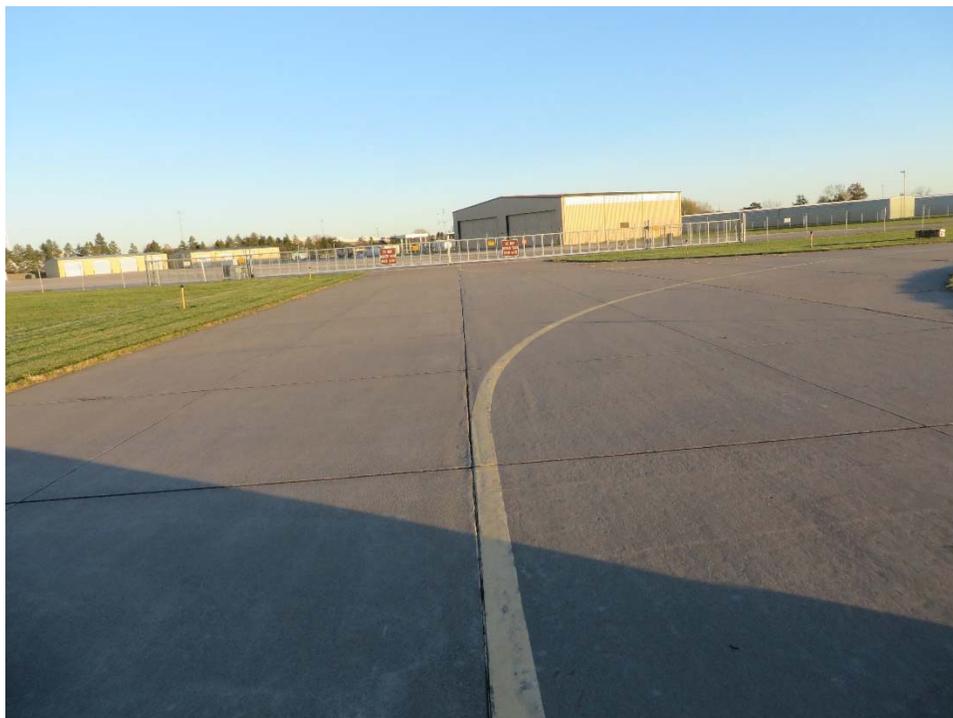
T02DA-01. Overview.



T02DA-01. ASR (Sample Unit No. 01).



T02DA-01. ASR (Sample Unit No. 01).



T02DA-02. Overview.



T02DA-03. Overview.



T02DA-03. LTD Cracking (Sample Unit No. 05).



T02DA-04. Overview.



T02DA-04. ASR (Sample Unit No. 05).



T02DA-04. Scaling (Sample Unit No. 05).



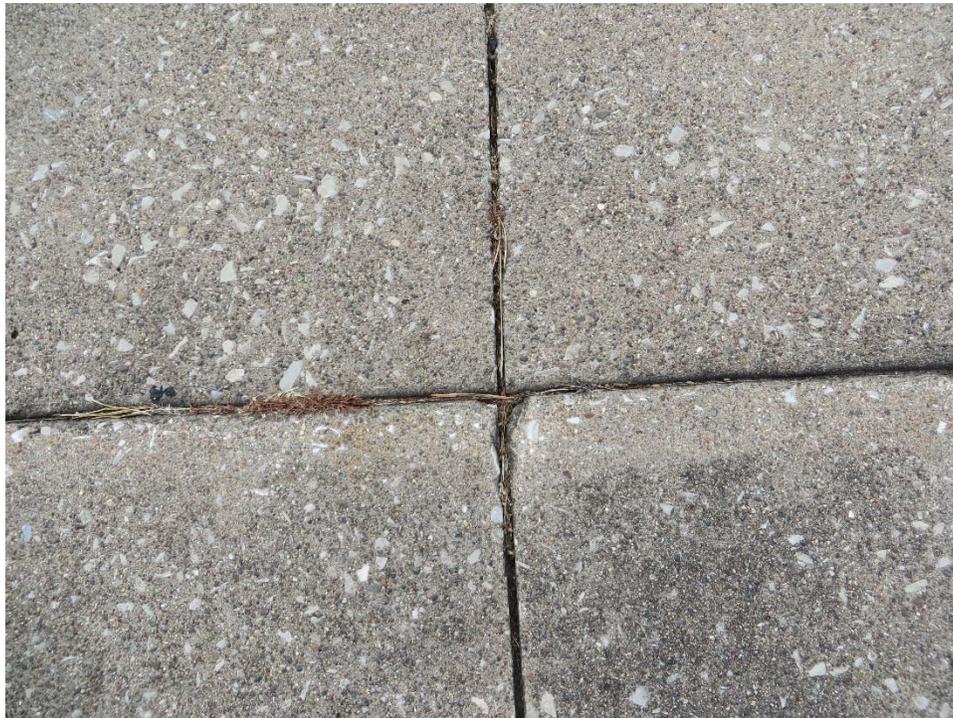
T02DA-05. Overview.



T02DA-06. Overview.



T03DA-01. Overview.



T03DA-01. Joint Seal Damage (Sample Unit No. 03).



T03DA-01. LTD Cracking (Sample Unit No. 03).



T03DA-01. Shattered Slab (Sample Unit No. 07).



T03DA-02. Overview.



T03DA-02. ASR (Sample Unit No. 04).



T04DA-01. Overview.



T04DA-01. Shattered Slab (Sample Unit No. 01).



T05DA-01. Overview.



T05DA-01. LTD Cracking (Sample Unit No. 02).



T06DA-01. Overview.



T07DA-01. Overview.

APPENDIX C
INSPECTION REPORT

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: A01DA Name: APRON 01 AT DAVENPORT Use: APRON Area: 44,052.00SqFt

Section: 01 of 1 From: TERMINAL To: TAXIWAYS 04 & 05 Last Const.: 06/01/1948
Surface: PCC Family: IowaPCCAPNCE Zone: Category: Rank: P
Area: 44,052.00SqFt Length: 300.00Ft Width: 150.00Ft
Slabs: 180 Slab Width: 12.27Ft Slab Length: 20.00Ft Joint Length: 5,467.48Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 9 Surveyed: 2

Conditions: PCI : 69

Inspection Comments:

Sample Number: 001 Type: R Area: 20.00Slabs PCI = 64

Sample Comments:

76 ASR	L	2.00 Slabs	Comments:
63 LINEAR CRACKING	L	3.00 Slabs	Comments:
63 LINEAR CRACKING	M	1.00 Slabs	Comments:
75 CORNER SPALLING	L	1.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	1.00 Slabs	Comments:
74 JOINT SPALLING	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:

Sample Number: 006 Type: R Area: 20.00Slabs PCI = 73

Sample Comments:

63 LINEAR CRACKING	L	1.00 Slabs	Comments:
63 LINEAR CRACKING	M	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
66 SMALL PATCH	M	1.00 Slabs	Comments:popout
74 JOINT SPALLING	L	1.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: A02DA Name: APRON 02 AT DAVENPORT Use: APRON Area: 79,445.00SqFt

Section: 01 of 2 From: BUILDINGS To: TAXIWAY 06 Last Const.: 06/01/2001
Surface: PCC Family: IowaPCCAPNCE Zone: Category: Rank: P
Area: 61,421.00SqFt Length: 300.00Ft Width: 200.00Ft
Slabs: 242 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 7,300.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 12 Surveyed: 3

Conditions: PCI : 65

Inspection Comments:

Sample Number: 003 Type: R Area: 20.00Slabs PCI = 78

Sample Comments:

76 ASR	L	2.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
63 LINEAR CRACKING	L	1.00 Slabs	Comments:

Sample Number: 005 Type: R Area: 20.00Slabs PCI = 47

Sample Comments:

63 LINEAR CRACKING	L	1.00 Slabs	Comments:
62 CORNER BREAK	M	1.00 Slabs	Comments:
76 ASR	L	3.00 Slabs	Comments:
76 ASR	M	3.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
66 SMALL PATCH	M	1.00 Slabs	Comments:popout
74 JOINT SPALLING	L	1.00 Slabs	Comments:

Sample Number: 011 Type: R Area: 20.00Slabs PCI = 70

Sample Comments:

63 LINEAR CRACKING	L	4.00 Slabs	Comments:
63 LINEAR CRACKING	M	1.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: A02DA Name: APRON 02 AT DAVENPORT Use: APRON Area: 79,445.00SqFt

Section: 02 of 2 From: WISE AVIATION To: Last Const.: 08/01/1996
Surface: PCC Family: IowaPCCAPNCE Zone: Category: Rank: P
Area: 18,018.00SqFt Length: 145.00Ft Width: 120.00Ft
Slabs: 160 Slab Width: 11.00Ft Slab Length: 10.50Ft Joint Length: 2,973.96Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 6 Surveyed: 2

Conditions: PCI : 85

Inspection Comments:

Sample Number: 001 Type: R Area: 20.00Slabs PCI = 88

Sample Comments:

65 JOINT SEAL DAMAGE H 20.00 Slabs Comments:

Sample Number: 004 Type: R Area: 14.00Slabs PCI = 80

Sample Comments:

75 CORNER SPALLING L 1.00 Slabs Comments:

74 JOINT SPALLING M 1.00 Slabs Comments:

65 JOINT SEAL DAMAGE H 14.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: A03DA Name: APRON 03 AT DAVENPORT Use: APRON Area: 27,299.00SqFt

Section: 01 of 1 From: HANGER To: TAXIWAY 03 Last Const.: 06/01/1963
Surface: PCC Family: IowaPCCAPNCE Zone: Category: Rank: P
Area: 27,299.00SqFt Length: 200.00Ft Width: 140.00Ft
Slabs: 80 Slab Width: 20.00Ft Slab Length: 12.50Ft Joint Length: 3,300.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 5 Surveyed: 2

Conditions: PCI: 11

Inspection Comments:

Sample Number: 002 Type: R Area: 21.00Slabs PCI = 11

Sample Comments:

65 JOINT SEAL DAMAGE	H	21.00 Slabs	Comments:
72 SHATTERED SLAB	M	6.00 Slabs	Comments:
63 LINEAR CRACKING	M	10.00 Slabs	Comments:
75 CORNER SPALLING	L	3.00 Slabs	Comments:
71 FAULTING	L	1.00 Slabs	Comments:
74 JOINT SPALLING	M	4.00 Slabs	Comments:
75 CORNER SPALLING	M	4.00 Slabs	Comments:
63 LINEAR CRACKING	L	5.00 Slabs	Comments:

Sample Number: 004 Type: R Area: 21.00Slabs PCI = 11

Sample Comments:

65 JOINT SEAL DAMAGE	H	21.00 Slabs	Comments:
63 LINEAR CRACKING	L	11.00 Slabs	Comments:
63 LINEAR CRACKING	M	5.00 Slabs	Comments:
74 JOINT SPALLING	M	11.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	2.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:
72 SHATTERED SLAB	L	1.00 Slabs	Comments:
72 SHATTERED SLAB	M	2.00 Slabs	Comments:
72 SHATTERED SLAB	H	1.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: A04DA Name: APRON 04 AT DAVENPORT Use: APRON Area: 60,957.00SqFt

Section: 01 of 1 From: MIDWEST AVIATION To: Last Const.: 06/01/1963
Surface: PCC Family: IowaPCCAPNCE Zone: Category: Rank: P
Area: 60,957.00SqFt Length: 200.00Ft Width: 295.00Ft
Slabs: 252 Slab Width: 20.00Ft Slab Length: 12.50Ft Joint Length: 7,175.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 13 Surveyed: 3

Conditions: PCI : 43

Inspection Comments:

Sample Number: 001 Type: R Area: 20.00Slabs PCI = 49

Sample Comments:

63 LINEAR CRACKING	L	8.00 Slabs	Comments:
63 LINEAR CRACKING	M	6.00 Slabs	Comments:
74 JOINT SPALLING	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:

Sample Number: 005 Type: R Area: 20.00Slabs PCI = 31

Sample Comments:

72 SHATTERED SLAB	L	2.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
62 CORNER BREAK	L	1.00 Slabs	Comments:
63 LINEAR CRACKING	L	8.00 Slabs	Comments:
63 LINEAR CRACKING	M	8.00 Slabs	Comments:
75 CORNER SPALLING	L	3.00 Slabs	Comments:
74 JOINT SPALLING	L	1.00 Slabs	Comments:

Sample Number: 009 Type: R Area: 20.00Slabs PCI = 50

Sample Comments:

65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
63 LINEAR CRACKING	M	4.00 Slabs	Comments:
63 LINEAR CRACKING	L	5.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:
75 CORNER SPALLING	L	1.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: R03DA Name: RUNWAY 03/21 AT DAVENPORT Use: RUNWAY Area: 389,303.00SqFt

Section: 01 of 1 From: SEE MAP To: SEE MAP Last Const.: 06/03/2015
Surface: PCC Family: IowaPCCRWNCE Zone: Category: Rank: S
Area: 389,303.00SqFt Length: 4,000.00Ft Width: 100.00Ft
Slabs: 2,076 Slab Width: 12.50Ft Slab Length: 15.00Ft Joint Length: 54,566.67Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 104 Surveyed: 11

Conditions: PCI : 100

Inspection Comments:

Sample Number: 004 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 007 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 022 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 025 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 040 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 043 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 058 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 078 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 081 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 096 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Sample Number: 099

Type: R

Area:

20.00Slabs

PCI = 100

Sample Comments:

<NO DISTRESSES>

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: R15DA Name: RUNWAY 15/33 AT DAVENPORT Use: RUNWAY Area: 481,560.00SqFt

Section: 01 of 3 From: RUNWAY END 15 To: RUNWAY END 33 Last Const.: 06/01/1947
Surface: PCC Family: IowaPCCRWNCE Zone: Category: Rank: P
Area: 324,860.00SqFt Length: 3,233.00Ft Width: 100.00Ft
Slabs: 1,361 Slab Width: 12.50Ft Slab Length: 19.00Ft Joint Length: 39,546.79Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 68 Surveyed: 7

Conditions: PCI : 58

Inspection Comments:

Sample Number: 006 Type: R Area: 20.00Slabs PCI = 53
Sample Comments:
66 SMALL PATCH L 3.00 Slabs Comments:
68 POPOUTS N 1.00 Slabs Comments:
76 ASR L 2.00 Slabs Comments:
76 ASR M 1.00 Slabs Comments:
63 LINEAR CRACKING L 3.00 Slabs Comments:
65 JOINT SEAL DAMAGE M 20.00 Slabs Comments:
66 SMALL PATCH L 1.00 Slabs Comments:
70 SCALING/CRAZING M 1.00 Slabs Comments:
66 SMALL PATCH H 2.00 Slabs Comments:popout
63 LINEAR CRACKING L 2.00 Slabs Comments:

Sample Number: 015 Type: R Area: 20.00Slabs PCI = 44
Sample Comments:
76 ASR H 2.00 Slabs Comments:
76 ASR M 1.00 Slabs Comments:
76 ASR L 1.00 Slabs Comments:
65 JOINT SEAL DAMAGE M 20.00 Slabs Comments:
75 CORNER SPALLING M 1.00 Slabs Comments:

Sample Number: 024 Type: R Area: 20.00Slabs PCI = 75
Sample Comments:
76 ASR L 4.00 Slabs Comments:
65 JOINT SEAL DAMAGE M 20.00 Slabs Comments:
67 LARGE PATCH/UTILITY L 1.00 Slabs Comments:
75 CORNER SPALLING M 1.00 Slabs Comments:
66 SMALL PATCH L 1.00 Slabs Comments:

Sample Number: 033 Type: R Area: 20.00Slabs PCI = 56
Sample Comments:
67 LARGE PATCH/UTILITY L 1.00 Slabs Comments:
76 ASR M 3.00 Slabs Comments:
76 ASR L 4.00 Slabs Comments:
75 CORNER SPALLING L 1.00 Slabs Comments:
65 JOINT SEAL DAMAGE M 20.00 Slabs Comments:

Sample Number: 045 Type: R Area: 20.00Slabs PCI = 43
Sample Comments:
76 ASR M 6.00 Slabs Comments:
67 LARGE PATCH/UTILITY L 1.00 Slabs Comments:
66 SMALL PATCH L 2.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

76 ASR	L	7.00	Slabs	Comments:
68 POPOUTS	N	4.00	Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00	Slabs	Comments:

Sample Number: 054 Type: R Area: 20.00Slabs PCI = 68

Sample Comments:

76 ASR	L	4.00	Slabs	Comments:
76 ASR	M	1.00	Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00	Slabs	Comments:
66 SMALL PATCH	L	6.00	Slabs	Comments:
75 CORNER SPALLING	M	1.00	Slabs	Comments:

Sample Number: 061 Type: R Area: 20.00Slabs PCI = 70

Sample Comments:

65 JOINT SEAL DAMAGE	M	20.00	Slabs	Comments:
66 SMALL PATCH	L	2.00	Slabs	Comments:
66 SMALL PATCH	H	1.00	Slabs	Comments:popout
68 POPOUTS	N	8.00	Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: R15DA Name: RUNWAY 15/33 AT DAVENPORT Use: RUNWAY Area: 481,560.00SqFt

Section: 02 of 3 From: SOUTH END OF R15-01 To: SOUTN END OF THE RWY Last Const.: 06/30/1994
Surface: PCC Family: IowaPCCRWNCE Zone: Category: Rank: P
Area: 126,500.00SqFt Length: 1,265.00Ft Width: 100.00Ft
Slabs: 698 Slab Width: 12.50Ft Slab Length: 14.50Ft Joint Length: 17,479.14Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 34 Surveyed: 8

Conditions: PCI : 95

Inspection Comments:

Sample Number: 01 Type: R Area: 20.00Slabs PCI = 91
Sample Comments:
65 JOINT SEAL DAMAGE M 20.00 Slabs Comments:
74 JOINT SPALLING L 1.00 Slabs Comments:

Sample Number: 06 Type: R Area: 20.00Slabs PCI = 98
Sample Comments:
65 JOINT SEAL DAMAGE L 20.00 Slabs Comments:

Sample Number: 08 Type: R Area: 20.00Slabs PCI = 98
Sample Comments:
65 JOINT SEAL DAMAGE L 20.00 Slabs Comments:

Sample Number: 11 Type: R Area: 20.00Slabs PCI = 98
Sample Comments:
65 JOINT SEAL DAMAGE L 20.00 Slabs Comments:

Sample Number: 15 Type: R Area: 20.00Slabs PCI = 97
Sample Comments:
66 SMALL PATCH L 1.00 Slabs Comments:
65 JOINT SEAL DAMAGE L 20.00 Slabs Comments:

Sample Number: 20 Type: R Area: 20.00Slabs PCI = 93
Sample Comments:
65 JOINT SEAL DAMAGE M 20.00 Slabs Comments:

Sample Number: 24 Type: R Area: 20.00Slabs PCI = 97
Sample Comments:
65 JOINT SEAL DAMAGE L 20.00 Slabs Comments:
66 SMALL PATCH L 1.00 Slabs Comments:

Sample Number: 25 Type: R Area: 20.00Slabs PCI = 91
Sample Comments:
65 JOINT SEAL DAMAGE M 20.00 Slabs Comments:
74 JOINT SPALLING L 1.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: R15DA Name: RUNWAY 15/33 AT DAVENPORT Use: RUNWAY Area: 481,560.00SqFt

Section: 03 of 3 From: SEE MAP To: SEE MAP Last Const.: 06/03/2015
Surface: PCC Family: IowaPCCRWNCE Zone: Category: Rank: P
Area: 157,200.00SqFt Length: 1,572.00Ft Width: 100.00Ft
Slabs: 840 Slab Width: 12.50Ft Slab Length: 15.00Ft Joint Length: 21,384.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 42 Surveyed: 5

Conditions: PCI : 100

Inspection Comments:

Sample Number: 006 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 011 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 018 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 023 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Sample Number: 030 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:
<NO DISTRESSES>

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T01DA Name: TAXIWAY 01 AT DAVENPORT Use: TAXIWAY Area: 292,448.00SqFt

Section: 01 of 5 From: RUNWAY END 15 To: SEE MAP Last Const.: 06/01/1947
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 109,694.00SqFt Length: 2,215.00Ft Width: 50.00Ft
Slabs: 403 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 12,132.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 23 Surveyed: 4

Conditions: PCI : 82

Inspection Comments:

Sample Number: 005 Type: R Area: 20.00Slabs PCI = 73

Sample Comments:

76 ASR	L	4.00 Slabs	Comments:
74 JOINT SPALLING	M	2.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	M	1.00 Slabs	Comments:

Sample Number: 010 Type: R Area: 20.00Slabs PCI = 76

Sample Comments:

75 CORNER SPALLING	M	1.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:
66 SMALL PATCH	H	1.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	1.00 Slabs	Comments:

Sample Number: 015 Type: R Area: 20.00Slabs PCI = 93

Sample Comments:

65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:
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Sample Number: 020 Type: R Area: 20.00Slabs PCI = 86

Sample Comments:

75 CORNER SPALLING	L	1.00 Slabs	Comments:
70 SCALING/CRAZING	M	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T01DA Name: TAXIWAY 01 AT DAVENPORT Use: TAXIWAY Area: 292,448.00SqFt

Section: 02 of 5 From: SEE MAP To: TAXIWAY 01 SECT 03 Last Const.: 06/01/1947
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 79,161.00SqFt Length: 1,545.00Ft Width: 50.00Ft
Slabs: 304 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 8,447.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 16 Surveyed: 3

Conditions: PCI : 58

Inspection Comments:

Sample Number: 002 Type: R Area: 20.00Slabs PCI = 74

Sample Comments:

75 CORNER SPALLING	M	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:
63 LINEAR CRACKING	L	1.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:
74 JOINT SPALLING	M	2.00 Slabs	Comments:
66 SMALL PATCH	M	1.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	1.00 Slabs	Comments:

Sample Number: 006 Type: R Area: 20.00Slabs PCI = 63

Sample Comments:

74 JOINT SPALLING	L	4.00 Slabs	Comments:
71 FAULTING	L	2.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	L	1.00 Slabs	Comments:
76 ASR	L	3.00 Slabs	Comments:
76 ASR	M	1.00 Slabs	Comments:

Sample Number: 010 Type: R Area: 20.00Slabs PCI = 38

Sample Comments:

74 JOINT SPALLING	L	3.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	2.00 Slabs	Comments:
76 ASR	H	2.00 Slabs	Comments:
76 ASR	M	2.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T01DA Name: TAXIWAY 01 AT DAVENPORT Use: TAXIWAY Area: 292,448.00SqFt

Section: 03 of 5 From: TAXIWAY 01 SECT 02 To: TAXIWAY 01 SECT 04 Last Const.: 06/01/1947
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 22,199.00SqFt Length: 150.00Ft Width: 158.00Ft
Slabs: 85 Slab Width: 20.00Ft Slab Length: 12.50Ft Joint Length: 2,773.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 4 Surveyed: 1

Conditions: PCI : 46

Inspection Comments:

Sample Number: 004 Type: R Area: 24.00Slabs PCI = 46

Sample Comments:

63 LINEAR CRACKING	L	4.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:
75 CORNER SPALLING	L	1.00 Slabs	Comments:
66 SMALL PATCH	M	4.00 Slabs	Comments:
66 SMALL PATCH	L	2.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	L	1.00 Slabs	Comments:
66 SMALL PATCH	L	1.00 Slabs	Comments:
76 ASR	L	5.00 Slabs	Comments:
63 LINEAR CRACKING	M	1.00 Slabs	Comments:
63 LINEAR CRACKING	L	1.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	M	2.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	24.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T01DA Name: TAXIWAY 01 AT DAVENPORT Use: TAXIWAY Area: 292,448.00SqFt

Section: 04 of 5 From: TAXIWAY 01 SECT 03 To: RUNWAY END 33 Last Const.: 06/01/1947
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 57,892.00SqFt Length: 1,085.00Ft Width: 50.00Ft
Slabs: 227 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 5,917.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 12 Surveyed: 3

Conditions: PCI : 84

Inspection Comments:

Sample Number: 003 Type: R Area: 20.00Slabs PCI = 97

Sample Comments:

66 SMALL PATCH L 2.00 Slabs Comments:
74 JOINT SPALLING L 1.00 Slabs Comments:

Sample Number: 006 Type: R Area: 20.00Slabs PCI = 91

Sample Comments:

73 SHRINKAGE CRACKING N 3.00 Slabs Comments:
65 JOINT SEAL DAMAGE L 20.00 Slabs Comments:
66 SMALL PATCH M 1.00 Slabs Comments:
66 SMALL PATCH L 1.00 Slabs Comments:

Sample Number: 011 Type: R Area: 20.00Slabs PCI = 63

Sample Comments:

66 SMALL PATCH M 2.00 Slabs Comments:
73 SHRINKAGE CRACKING N 4.00 Slabs Comments:
63 LINEAR CRACKING L 5.00 Slabs Comments:
62 CORNER BREAK L 1.00 Slabs Comments:
74 JOINT SPALLING L 4.00 Slabs Comments:
75 CORNER SPALLING L 4.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T01DA Name: TAXIWAY 01 AT DAVENPORT Use: TAXIWAY Area: 292,448.00SqFt

Section: 05 of 5 From: SEE MAP To: SEE MAP Last Const.: 06/03/2015
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 23,502.00SqFt Length: 330.00Ft Width: 50.00Ft
Slabs: 168 Slab Width: 12.50Ft Slab Length: 13.30Ft Joint Length: 2,180.60Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 8 Surveyed: 2

Conditions: PCI : 100

Inspection Comments:

Sample Number: 02 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:

<NO DISTRESSES>

Sample Number: 07 Type: R Area: 21.00Slabs PCI = 100

Sample Comments:

<NO DISTRESSES>

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T02DA Name: TAXIWAY 02 AT DAVENPORT Use: TAXIWAY Area: 119,563.00SqFt

Section: 01 of 6 From: SEE MAP To: SEE MAP Last Const.: 06/01/1979
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 2,941.00SqFt Length: 75.00Ft Width: 40.00Ft
Slabs: 24 Slab Width: 10.00Ft Slab Length: 12.50Ft Joint Length: 425.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 1 Surveyed: 1

Conditions: PCI : 66

Inspection Comments:

Sample Number: 001 Type: R Area: 24.00Slabs PCI = 66

Sample Comments:

62 CORNER BREAK	M	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	24.00 Slabs	Comments:
76 ASR	L	10.00 Slabs	Comments:
63 LINEAR CRACKING	M	1.00 Slabs	Comments:
62 CORNER BREAK	L	1.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T02DA Name: TAXIWAY 02 AT DAVENPORT Use: TAXIWAY Area: 119,563.00SqFt

Section: 02 of 6 From: TAXIWAY 02 SECT 01 To: TAXIWAY 02 SECT 03 Last Const.: 01/01/2005
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 10,040.00SqFt Length: 230.00Ft Width: 40.00Ft
Slabs: 120 Slab Width: 10.00Ft Slab Length: 10.00Ft Joint Length: 1,570.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments: estimated LCD

Last Insp. Date: 11/02/2015 Total Samples: 5 Surveyed: 2

Conditions: PCI : 98

Inspection Comments:

Sample Number: 01 Type: R Area: 20.00Slabs PCI = 98

Sample Comments:

65 JOINT SEAL DAMAGE L 20.00 Slabs Comments:

Sample Number: 05 Type: R Area: 16.00Slabs PCI = 98

Sample Comments:

65 JOINT SEAL DAMAGE L 16.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T02DA Name: TAXIWAY 02 AT DAVENPORT Use: TAXIWAY Area: 119,563.00SqFt

Section: 03 of 6 From: TAXIWAY 02 SECT 02 To: TAXIWAY 01 SECT 02 Last Const.: 06/01/1979
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 63,040.00SqFt Length: 2,020.00Ft Width: 30.00Ft
Slabs: 509 Slab Width: 10.00Ft Slab Length: 12.39Ft Joint Length: 8,901.04Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments: avg slab length entered and drawn

Last Insp. Date: 11/02/2015 Total Samples: 25 Surveyed: 4

Conditions: PCI : 49

Inspection Comments:

Sample Number: 005 Type: R Area: 21.00Slabs PCI = 50
Sample Comments:
63 LINEAR CRACKING L 17.00 Slabs Comments:
63 LINEAR CRACKING M 4.00 Slabs Comments:
65 JOINT SEAL DAMAGE H 21.00 Slabs Comments:
66 SMALL PATCH H 1.00 Slabs Comments:popout

Sample Number: 011 Type: R Area: 21.00Slabs PCI = 46
Sample Comments:
76 ASR L 1.00 Slabs Comments:
63 LINEAR CRACKING L 5.00 Slabs Comments:
63 LINEAR CRACKING M 4.00 Slabs Comments:
65 JOINT SEAL DAMAGE H 21.00 Slabs Comments:
74 JOINT SPALLING L 1.00 Slabs Comments:
63 LINEAR CRACKING M 3.00 Slabs Comments:

Sample Number: 017 Type: R Area: 21.00Slabs PCI = 52
Sample Comments:
62 CORNER BREAK L 1.00 Slabs Comments:
74 JOINT SPALLING L 1.00 Slabs Comments:
63 LINEAR CRACKING L 8.00 Slabs Comments:
63 LINEAR CRACKING M 4.00 Slabs Comments:
65 JOINT SEAL DAMAGE M 21.00 Slabs Comments:

Sample Number: 023 Type: R Area: 21.00Slabs PCI = 50
Sample Comments:
65 JOINT SEAL DAMAGE M 21.00 Slabs Comments:
75 CORNER SPALLING L 1.00 Slabs Comments:
63 LINEAR CRACKING M 4.00 Slabs Comments:
73 SHRINKAGE CRACKING N 2.00 Slabs Comments:
72 SHATTERED SLAB L 1.00 Slabs Comments:
63 LINEAR CRACKING L 7.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T02DA Name: TAXIWAY 02 AT DAVENPORT Use: TAXIWAY Area: 119,563.00SqFt

Section: 04 of 6 From: TAXIWAY 01 SECT 02 To: SEE MAP Last Const.: 06/01/1947
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 25,205.00SqFt Length: 490.00Ft Width: 50.00Ft
Slabs: 103 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 2,645.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 5 Surveyed: 2

Conditions: PCI : 80

Inspection Comments:

Sample Number: 002 Type: R Area: 20.00Slabs PCI = 87

Sample Comments:

75 CORNER SPALLING	L	2.00 Slabs	Comments:
74 JOINT SPALLING	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:

Sample Number: 005 Type: R Area: 20.00Slabs PCI = 72

Sample Comments:

74 JOINT SPALLING	L	1.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:
70 SCALING/CRAZING	M	1.00 Slabs	Comments:
76 ASR	L	1.00 Slabs	Comments:
75 CORNER SPALLING	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	M	20.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T02DA Name: TAXIWAY 02 AT DAVENPORT Use: TAXIWAY Area: 119,563.00SqFt

Section: 05 of 6 From: SEE MAP To: SEE MAP Last Const.: 06/01/2015
Surface: APC Family: IowaAPCTWNorthern Zone: Category: Rank: P
Area: 7,804.00SqFt Length: 125.00Ft Width: 50.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 2 Surveyed: 1

Conditions: PCI : 100

Inspection Comments:

Sample Number: 02 Type: R Area: 4,133.00SqFt PCI = 100

Sample Comments:

<NO DISTRESSES>

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T02DA Name: TAXIWAY 02 AT DAVENPORT Use: TAXIWAY Area: 119,563.00SqFt

Section: 06 of 6 From: SEE MAP To: SEE MAP Last Const.: 06/03/2015
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 10,533.00SqFt Length: 290.00Ft Width: 35.00Ft
Slabs: 118 Slab Width: 8.75Ft Slab Length: 10.00Ft Joint Length: 1,850.00Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 6 Surveyed: 2

Conditions: PCI : 100

Inspection Comments:

Sample Number: 02 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:

<NO DISTRESSES>

Sample Number: 05 Type: R Area: 20.00Slabs PCI = 100

Sample Comments:

<NO DISTRESSES>

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T03DA Name: TAXIWAY 03 AT DAVENPORT Use: TAXIWAY Area: 95,754.00SqFt

Section: 01 of 2 From: APRON 03 To: TAXIWAY 01 SECT 02 Last Const.: 06/01/1963
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 61,083.00SqFt Length: 1,200.00Ft Width: 50.00Ft
Slabs: 248 Slab Width: 12.50Ft Slab Length: 19.67Ft Joint Length: 6,600.33Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 12 Surveyed: 4

Conditions: PCI: 27

Inspection Comments:

Sample Number: 003 Type: R Area: 20.00Slabs PCI = 47

Sample Comments:

63 LINEAR CRACKING	L	1.00 Slabs	Comments:
63 LINEAR CRACKING	M	5.00 Slabs	Comments:
74 JOINT SPALLING	M	2.00 Slabs	Comments:
75 CORNER SPALLING	L	1.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:

Sample Number: 007 Type: R Area: 20.00Slabs PCI = 3

Sample Comments:

63 LINEAR CRACKING	M	4.00 Slabs	Comments:
72 SHATTERED SLAB	M	2.00 Slabs	Comments:
75 CORNER SPALLING	L	1.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
72 SHATTERED SLAB	L	2.00 Slabs	Comments:
72 SHATTERED SLAB	M	5.00 Slabs	Comments:
72 SHATTERED SLAB	H	3.00 Slabs	Comments:

Sample Number: 008 Type: R Area: 20.00Slabs PCI = 37

Sample Comments:

65 JOINT SEAL DAMAGE	H	20.00 Slabs	Comments:
63 LINEAR CRACKING	L	8.00 Slabs	Comments:
64 DURABILITY CRACKING	L	2.00 Slabs	Comments:
63 LINEAR CRACKING	L	3.00 Slabs	Comments:
63 LINEAR CRACKING	M	4.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	1.00 Slabs	Comments:
72 SHATTERED SLAB	M	1.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:

Sample Number: 010 Type: R Area: 20.00Slabs PCI = 20

Sample Comments:

63 LINEAR CRACKING	L	6.00 Slabs	Comments:
63 LINEAR CRACKING	M	10.00 Slabs	Comments:
75 CORNER SPALLING	M	4.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	2.00 Slabs	Comments:
72 SHATTERED SLAB	L	1.00 Slabs	Comments:
72 SHATTERED SLAB	M	2.00 Slabs	Comments:
74 JOINT SPALLING	M	2.00 Slabs	Comments:
75 CORNER SPALLING	M	1.00 Slabs	Comments:
64 DURABILITY CRACKING	L	2.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

65 JOINT SEAL DAMAGE

H

20.00 Slabs

Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T03DA Name: TAXIWAY 03 AT DAVENPORT Use: TAXIWAY Area: 95,754.00SqFt

Section: 02 of 2 From: TAXIWAY 01 SECT 02 To: RUNWAY 15/33 Last Const.: 06/01/1947
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 34,671.00SqFt Length: 645.00Ft Width: 50.00Ft
Slabs: 136 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 3,497.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 8 Surveyed: 2

Conditions: PCI : 92

Inspection Comments:

Sample Number: 004 Type: R Area: 20.00Slabs PCI = 86

Sample Comments:

76 ASR L 3.00 Slabs Comments:

75 CORNER SPALLING L 2.00 Slabs Comments:

Sample Number: 006 Type: R Area: 20.00Slabs PCI = 98

Sample Comments:

74 JOINT SPALLING L 1.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T04DA Name: TAXIWAY 04 AT DAVENPORT Use: TAXIWAY Area: 7,172.00SqFt

Section: 01 of 1 From: APRON 01 To: TAXIWAY 01 SECT 02 Last Const.: 06/01/1948
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 7,172.00SqFt Length: 95.00Ft Width: 50.00Ft
Slabs: 30 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 472.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 2 Surveyed: 1

Conditions: PCI : 38

Inspection Comments:

Sample Number: 001 Type: R Area: 13.00Slabs PCI = 38

Sample Comments:

65 JOINT SEAL DAMAGE	M	13.00 Slabs	Comments:
72 SHATTERED SLAB	L	1.00 Slabs	Comments:
63 LINEAR CRACKING	L	5.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	L	2.00 Slabs	Comments:
76 ASR	L	5.00 Slabs	Comments:
73 SHRINKAGE CRACKING	N	1.00 Slabs	Comments:
66 SMALL PATCH	L	1.00 Slabs	Comments:
74 JOINT SPALLING	M	1.00 Slabs	Comments:
63 LINEAR CRACKING	M	2.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T05DA Name: TAXIWAY 05 AT DAVENPORT Use: TAXIWAY Area: 7,260.00SqFt

Section: 01 of 1 From: APRON 01 To: TAXIWAY 01 SECT 02 Last Const.: 06/01/1948
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 7,260.00SqFt Length: 95.00Ft Width: 50.00Ft
Slabs: 28 Slab Width: 12.50Ft Slab Length: 20.00Ft Joint Length: 472.50Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 2 Surveyed: 1

Conditions: PCI : 37

Inspection Comments:

Sample Number: 002 Type: R Area: 19.00Slabs PCI = 37

Sample Comments:

63 LINEAR CRACKING	L	5.00 Slabs	Comments:
63 LINEAR CRACKING	M	5.00 Slabs	Comments:
76 ASR	M	1.00 Slabs	Comments:
76 ASR	L	2.00 Slabs	Comments:
62 CORNER BREAK	M	1.00 Slabs	Comments:
66 SMALL PATCH	L	3.00 Slabs	Comments:
67 LARGE PATCH/UTILITY	L	1.00 Slabs	Comments:
65 JOINT SEAL DAMAGE	H	19.00 Slabs	Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T06DA Name: TAXIWAY 06 AT DAVENPORT Use: TAXIWAY Area: 13,979.00SqFt

Section: 01 of 1 From: APRON 02 To: TAXIWAY 02 SECT 03 Last Const.: 08/01/1996
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 13,979.00SqFt Length: 208.00Ft Width: 40.00Ft
Slabs: 87 Slab Width: 11.75Ft Slab Length: 13.70Ft Joint Length: 1,067.38Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 5 Surveyed: 2

Conditions: PCI : 88

Inspection Comments:

Sample Number: 001 Type: R Area: 28.00Slabs PCI = 88

Sample Comments:

65 JOINT SEAL DAMAGE H 28.00 Slabs Comments:

Sample Number: 002 Type: R Area: 23.00Slabs PCI = 88

Sample Comments:

65 JOINT SEAL DAMAGE H 23.00 Slabs Comments:

Re-inspection Report

IA2015

Report Generated Date: March 02, 2016

Network: DVN Name: DAVENPORT MUNICIPAL AIRPORT

Branch: T07DA Name: TAXIWAY 07 AT DAVENPORT Use: TAXIWAY Area: 62,843.98SqFt

Section: 01 of 1 From: TAXIWAY 04 To: SOUTH END OF 15/33 Last Const.: 06/30/1994
Surface: PCC Family: IowaPCCTWNCE Zone: Category: Rank: P
Area: 62,844.00SqFt Length: 1,526.00Ft Width: 35.00Ft
Slabs: 301 Slab Width: 13.00Ft Slab Length: 13.00Ft Joint Length: 6,655.92Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date: 11/02/2015 Total Samples: 19 Surveyed: 3

Conditions: PCI : 96

Inspection Comments:

Sample Number: 002 Type: R Area: 21.00Slabs PCI = 96
Sample Comments:
74 JOINT SPALLING M 1.00 Slabs Comments:

Sample Number: 007 Type: R Area: 21.00Slabs PCI = 100
Sample Comments:
<NO DISTRESSES>

Sample Number: 012 Type: R Area: 21.00Slabs PCI = 92
Sample Comments:
71 FAULTING L 2.00 Slabs Comments:

APPENDIX D

WORK HISTORY REPORT

Date:03/02/2016

Work History Report

1 of 5

Pavement Database:IA2015

Network: DVN **Branch:** A01DA (APRON 01 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1948 **Use:** APRON **Rank P Length:** 300.00 Ft **Width:** 150.00 Ft **True Area:** 44,052.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/1948	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** A02DA (APRON 02 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/2001 **Use:** APRON **Rank P Length:** 300.00 Ft **Width:** 200.00 Ft **True Area:** 61,421.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2001	NC-PC	New Construction - PCC (Majc			True	
06/01/1950	NC-PC	New Construction - PCC			True	

Network: DVN **Branch:** A02DA (APRON 02 AT DAVENPORT) **Section:** 02 **Surface:** PCC
L.C.D.: 08/01/1996 **Use:** APRON **Rank P Length:** 145.00 Ft **Width:** 120.00 Ft **True Area:** 18,018.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
08/01/1996	SR-PC	Surface Reconstruction - PCC			True	
06/01/1950	NC-AC	New Construction - AC			True	

Network: DVN **Branch:** A03DA (APRON 03 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1963 **Use:** APRON **Rank P Length:** 200.00 Ft **Width:** 140.00 Ft **True Area:** 27,299.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/1963	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** A04DA (APRON 04 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1963 **Use:** APRON **Rank P Length:** 200.00 Ft **Width:** 295.00 Ft **True Area:** 60,957.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/1963	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** R03DA (RUNWAY 03/21 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/03/2015 **Use:** RUNWAY **Rank S Length:** 4,000.00 Ft **Width:** 100.00 Ft **True Area:**389,303.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/03/2015	CR-PC	Complete Reconstruction - PC	\$0	8.00	True	8" P-501 PCC
06/02/2015	SB-AG	Subbase - Aggregate	\$0	8.00	False	8" P-209 CAB
06/01/2015	SG-ST	Subgrade - Stabilized	\$0	12.00	False	12" P-158 FLY ASH TREATED SUBGRADE
06/01/2009	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	EST
06/01/2004	PA-PF	Patching - PCC Full Depth	\$0	0.00	False	
06/01/2003	PA-PF	Patching - PCC Full Depth	\$0	0.00	False	
06/01/1994	CS-PC	Crack Sealing - PCC	\$0	0.00	False	
06/01/1994	JS-LC	Joint Seal (Localized)	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** R15DA (RUNWAY 15/33 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1947 **Use:** RUNWAY **Rank P Length:** 3,233.00 Ft **Width:** 100.00 Ft **True Area:**324,860.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2015	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	2013-2015
06/01/2015	SL-PC	Slab Replacement - PCC	\$0	0.00	False	2013-2015
06/01/2004	PA-PF	Patching - PCC Full Depth	\$0	0.00	False	
06/01/2003	PA-PF	Patching - PCC Full Depth	\$0	0.00	False	
06/01/1997	JS-LC	Joint Seal (Localized)	\$0	0.00	False	
06/01/1997	CS-PC	Crack Sealing - PCC	\$0	0.00	False	

Date:03/02/2016

Work History Report

2 of 5

Pavement Database:IA2015

06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	
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Network: DVN **Branch:** R15DA (RUNWAY 15/33 AT DAVENPORT) **Section:** 02 **Surface:** PCC
L.C.D.: 06/30/1994 **Use:** RUNWAY **Rank P Length:** 1,265.00 Ft **Width:** 100.00 Ft **True Area:**126,500.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2015	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	
06/01/2004	PA-PF	Patching - PCC Full Depth	\$0	0.00	False	
06/01/2003	PA-PF	Patching - PCC Full Depth	\$0	0.00	False	
06/01/1997	JS-LC	Joint Seal (Localized)	\$0	0.00	False	
06/01/1997	CS-PC	Crack Sealing - PCC	\$0	0.00	False	
06/30/1994	CR-PC	Complete Reconstruction - PC			True	Assumed date
06/30/1949	NC-PC	New Construction - PCC			True	

Network: DVN **Branch:** R15DA (RUNWAY 15/33 AT DAVENPORT) **Section:** 03 **Surface:** PCC
L.C.D.: 06/03/2015 **Use:** RUNWAY **Rank P Length:** 1,572.00 Ft **Width:** 100.00 Ft **True Area:**157,200.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/03/2015	CR-PC	Complete Reconstruction - PC	\$0	10.00	True	10" P-501 PCC
06/02/2015	SB-AG	Subbase - Aggregate	\$0	6.00	False	6" P-209 CAB
06/01/2015	SG-ST	Subgrade - Stabilized	\$0	12.00	False	12" P-158 FLY ASH TREATED SUBGRADE
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T01DA (TAXIWAY 01 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1947 **Use:** TAXIWAY **Rank P Length:** 2,215.00 Ft **Width:** 50.00 Ft **True Area:**109,694.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2013	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T01DA (TAXIWAY 01 AT DAVENPORT) **Section:** 02 **Surface:** PCC
L.C.D.: 06/01/1947 **Use:** TAXIWAY **Rank P Length:** 1,545.00 Ft **Width:** 50.00 Ft **True Area:** 79,161.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
08/01/2014	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T01DA (TAXIWAY 01 AT DAVENPORT) **Section:** 03 **Surface:** PCC
L.C.D.: 06/01/1947 **Use:** TAXIWAY **Rank P Length:** 150.00 Ft **Width:** 158.00 Ft **True Area:** 22,199.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
03/01/2015	JS-LC	Joint Seal (Localized)	\$0	0.00	False	
08/01/2014	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	
08/01/2014	SL-PC	Slab Replacement - PCC	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T01DA (TAXIWAY 01 AT DAVENPORT) **Section:** 04 **Surface:** PCC
L.C.D.: 06/01/1947 **Use:** TAXIWAY **Rank P Length:** 1,085.00 Ft **Width:** 50.00 Ft **True Area:** 57,892.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
03/01/2015	JS-LC	Joint Seal (Localized)	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T01DA (TAXIWAY 01 AT DAVENPORT) **Section:** 05 **Surface:** PCC
L.C.D.: 06/03/2015 **Use:** TAXIWAY **Rank P Length:** 330.00 Ft **Width:** 50.00 Ft **True Area:** 23,502.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments

Date:03/02/2016

Work History Report

3 of 5

Pavement Database:IA2015

06/03/2015	CR-PC	Complete Reconstruction - PC	\$0	10.00	True	10" P-501 PCC
06/02/2015	SB-AG	Subbase - Aggregate	\$0	6.00	False	6" P-209 CAB
06/01/2015	SG-ST	Subgrade - Stabilized	\$0	12.00	False	12" FLY ASH TREATED SUBGRADE

Network: DVN **Branch:** T02DA (TAXIWAY 02 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1979 **Use:** TAXIWAY **Rank P Length:** 75.00 Ft **Width:** 40.00 Ft **True Area:** 2,941.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/1979	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T02DA (TAXIWAY 02 AT DAVENPORT) **Section:** 02 **Surface:** PCC
L.C.D.: 01/01/2005 **Use:** TAXIWAY **Rank P Length:** 230.00 Ft **Width:** 40.00 Ft **True Area:** 10,040.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
01/01/2005	SR-PC	Surface Reconstruction - PCC	\$0	0.00	True	
06/01/1972	NC-PC	New Construction - PCC			True	

Network: DVN **Branch:** T02DA (TAXIWAY 02 AT DAVENPORT) **Section:** 03 **Surface:** PCC
L.C.D.: 06/01/1979 **Use:** TAXIWAY **Rank P Length:** 2,020.00 Ft **Width:** 30.00 Ft **True Area:** 63,040.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2005	CS-PC	Crack Sealing - PCC	\$0	0.00	False	
06/01/1979	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T02DA (TAXIWAY 02 AT DAVENPORT) **Section:** 04 **Surface:** PCC
L.C.D.: 06/01/1947 **Use:** TAXIWAY **Rank P Length:** 490.00 Ft **Width:** 50.00 Ft **True Area:** 25,205.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2013	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	
06/01/2009	SL-PC	Slab Replacement - PCC	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T02DA (TAXIWAY 02 AT DAVENPORT) **Section:** 05 **Surface:** APC
L.C.D.: 06/01/2015 **Use:** TAXIWAY **Rank P Length:** 125.00 Ft **Width:** 50.00 Ft **True Area:** 7,804.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2015	OL-AS	Overlay - AC Structural	\$0	3.00	True	3" P-405 AC
06/01/2009	SL-PC	Slab Replacement - PCC	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T02DA (TAXIWAY 02 AT DAVENPORT) **Section:** 06 **Surface:** PCC
L.C.D.: 06/03/2015 **Use:** TAXIWAY **Rank P Length:** 290.00 Ft **Width:** 35.00 Ft **True Area:** 10,533.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/03/2015	CR-PC	Complete Reconstruction - PC	\$0	8.00	True	8" P-501 PCC
06/02/2015	SB-AG	Subbase - Aggregate	\$0	8.00	False	8" P-209 CAB
06/01/2015	SG-ST	Subgrade - Stabilized	\$0	12.00	False	12" P-158 FLY ASH TREATED SUBGRADE

Network: DVN **Branch:** T03DA (TAXIWAY 03 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1963 **Use:** TAXIWAY **Rank P Length:** 1,200.00 Ft **Width:** 50.00 Ft **True Area:** 61,083.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/1963	NC-PC	New Construction - PCC	\$0	0.00	True	

Date:03/02/2016

Work History Report

4 of 5

Pavement Database:IA2015

Network: DVN **Branch:** T03DA (TAXIWAY 03 AT DAVENPORT) **Section:** 02 **Surface:** PCC
L.C.D.: 06/01/1947 **Use:** TAXIWAY **Rank P Length:** 645.00 Ft **Width:** 50.00 Ft **True Area:** 34,671.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
03/01/2015	JS-LC	Joint Seal (Localized)	\$0	0.00	False	
08/01/2014	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	
06/01/1947	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T04DA (TAXIWAY 04 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1948 **Use:** TAXIWAY **Rank P Length:** 95.00 Ft **Width:** 50.00 Ft **True Area:** 7,172.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/2014	PA-PP	Patching - PCC Partial Depth	\$0	0.00	False	
06/01/2009	CS-PC	Crack Sealing - PCC	\$0	0.00	False	
06/01/1948	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T05DA (TAXIWAY 05 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/01/1948 **Use:** TAXIWAY **Rank P Length:** 95.00 Ft **Width:** 50.00 Ft **True Area:** 7,260.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
06/01/1948	NC-PC	New Construction - PCC	\$0	0.00	True	

Network: DVN **Branch:** T06DA (TAXIWAY 06 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 08/01/1996 **Use:** TAXIWAY **Rank P Length:** 208.00 Ft **Width:** 40.00 Ft **True Area:** 13,979.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
08/01/1996	SR-PC	Surface Reconstruction - PCC			True	
06/01/1950	NC-AC	New Construction - AC			True	

Network: DVN **Branch:** T07DA (TAXIWAY 07 AT DAVENPORT) **Section:** 01 **Surface:** PCC
L.C.D.: 06/30/1994 **Use:** TAXIWAY **Rank P Length:** 1,526.00 Ft **Width:** 35.00 Ft **True Area:** 62,844.00 SqF

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
03/01/2015	JS-LC	Joint Seal (Localized)	\$0	0.00	False	
06/01/2005	PA-PF	Patching - PCC Full Depth	\$0	0.00	False	
06/30/1994	NC-PC	New Construction - PCC	\$0	0.00	True	

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Complete Reconstruction - PCC	4	580,538.00	9.00	1.15
Complete Reconstruction - PCC	1	126,500.00		
Crack Sealing - PCC	5	910,875.00	.00	.00
Joint Seal (Localized)	7	1,018,269.00	.00	.00
New Construction - AC	2	31,997.00		
New Construction - PCC	22	1,742,598.00	.00	.00
New Construction - PCC (Major	1	61,421.00		
Overlay - AC Structural	1	7,804.00	3.00	
Patching - PCC Full Depth	7	1,744,170.00	.00	.00
Patching - PCC Partial Depth	9	1,118,765.00	.00	.00
Slab Replacement - PCC	4	380,068.00	.00	.00
Subbase - Aggregate	4	580,538.00	7.00	1.15
Subgrade - Stabilized	4	580,538.00	12.00	.00
Surface Reconstruction - PCC	1	10,040.00	.00	
Surface Reconstruction - PCC	2	31,997.00		

APPENDIX E

LOCALIZED PREVENTATIVE 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
	Medium	AC Patch
	High	AC Patch
Bleeding	N/A	Monitor
Block Cracking	Low	Monitor
	Medium	Crack Seal
	High	Crack Seal
Corrugation	Low	Monitor
	Medium	AC Patch
	High	AC Patch
Depression	Low	Monitor
	Medium	Monitor
	High	AC Patch
Jet Blast Erosion	N/A	AC Patch
Joint Reflection Cracking	Low	Monitor
	Medium	Crack Seal
	High	Crack Seal
L&T Cracking	Low	Monitor
	Medium	Crack Seal
	High	Crack Seal
Oil Spill Damage	N/A	AC Patch
Patching	Low	Monitor
	Medium	AC Patch
	High	AC Patch
Polished Aggregate	N/A	Monitor
Raveling	Low	Monitor
	Medium	AC Patch
	High	AC Patch
Rutting	Low	Monitor
	Medium	Monitor
	High	AC Patch
Shoving	Low	Monitor
	Medium	AC Patch
	High	AC Patch
Slippage Cracking	N/A	AC Patch
Swelling	Low	Monitor
	Medium	Monitor
	High	AC Patch
Weathering	Low	Monitor
	Medium	Monitor
	High	AC Patch

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

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

Table E-3. 2015 unit costs for preventive maintenance actions.

Maintenance Action	Unit Cost
AC Patch – Asphalt-Surfaced Pavement	\$13.39/sf
Crack Sealing – Asphalt-Surfaced Pavement	\$2.29/lf
Partial Depth PCC Patch – PCC Pavement	\$34.28/sf
Full Depth PCC Patch – PCC Pavement	\$15.31/sf
Crack Sealing – PCC Pavement	\$2.75/lf
Joint Resealing – PCC Pavement	\$2.75/lf
Grinding – PCC Pavement	\$0.33/sf
Slab Replacement – PCC Pavement	\$15.31/sf

Table E-4. 2015 unit costs (per square foot) based on PCI Ranges.

Pavement Type	PCI Range										
	0	10	20	30	40	50	60	70	80	90	100
Asphalt-Surfaced	\$9.51	\$9.51	\$9.51	\$9.51	\$9.51	\$4.50	\$4.50	\$4.50	\$0.00	\$0.00	\$0.00
PCC	\$15.87	\$15.87	\$15.87	\$15.87	\$15.87	\$7.50	\$7.50	\$7.50	\$0.00	\$0.00	\$0.00

APPENDIX F

YEAR 2016 LOCALIZED PREVENTIVE MAINTENANCE DETAILS

Table F-1. Year 2016 localized preventive maintenance details.

Branch ¹	Section ¹	Distress Type ²	Severity	Distress Quantity	Unit	Maintenance Action	Unit Cost	Estimated Cost ³
A01DA	01	Joint Spalling	Medium	5	Slabs	Patching - PCC Partial Depth	\$34.28	\$996
		Joint Seal Damage	High	180	Slabs	Joint Seal	\$2.75	\$15,036
		LTD Cracking	Medium	9	Slabs	Crack Sealing - PCC	\$2.75	\$399
		Small Patch	Medium	5	Slabs	Patching - PCC Full Depth	\$15.31	\$185
A02DA	01	ASR	Medium	12	Slabs	Slab Replacement - PCC	\$15.31	\$46,313
		Corner Break	Medium	4	Slabs	Patching - PCC Full Depth	\$15.31	\$1,994
		Joint Spalling	Medium	4	Slabs	Patching - PCC Partial Depth	\$34.28	\$893
		Joint Seal Damage	High	242	Slabs	Joint Seal	\$2.75	\$20,075
		LTD Cracking	Medium	4	Slabs	Crack Sealing - PCC	\$2.75	\$180
		Small Patch	Medium	4	Slabs	Patching - PCC Full Depth	\$15.31	\$166
	02	Joint Spalling	Medium	5	Slabs	Patching - PCC Partial Depth	\$34.28	\$1,042
		Joint Seal Damage	High	160	Slabs	Joint Seal	\$2.75	\$8,178
R15DA	02	Joint Seal Damage	Medium	262	Slabs	Joint Seal	\$2.75	\$18,025
T01DA	01	Corner Spalling	Medium	5	Slabs	Patching - PCC Partial Depth	\$34.28	\$465
		Joint Spalling	Medium	15	Slabs	Patching - PCC Partial Depth	\$34.28	\$3,346
		Joint Seal Damage	Medium	403	Slabs	Joint Seal	\$2.75	\$33,364
		Large Patch	Medium	5	Slabs	Patching - PCC Full Depth	\$15.31	\$4,744
		Scaling	Medium	5	Slabs	Patching - PCC Partial Depth	\$34.28	\$8,852
		Small Patch	High	5	Slabs	Patching - PCC Full Depth	\$15.31	\$208
	04	Corner Break	Low	4	Slabs	Crack Sealing - PCC	\$2.75	\$85
		Small Patch	Medium	11	Slabs	Patching - PCC Full Depth	\$15.31	\$468
T02DA	04	Corner Spalling	Medium	3	Slabs	Patching - PCC Partial Depth	\$34.28	\$238
		Joint Spalling	Medium	3	Slabs	Patching - PCC Partial Depth	\$34.28	\$570
		Joint Seal Damage	Medium	103	Slabs	Joint Seal	\$2.75	\$7,274
		Scaling	Medium	3	Slabs	Patching - PCC Partial Depth	\$34.28	\$4,525

Table F-1. Year 2016 localized preventive maintenance details (continued).

Branch¹	Section¹	Distress Type²	Severity	Distress Quantity	Unit	Maintenance Action	Unit Cost	Estimated Cost³
T06DA	01	Joint Seal Damage	High	87	Slabs	Joint Seal	\$2.75	\$2,935
T07DA	01	Joint Spalling	Medium	5	Slabs	Patching - PCC Partial Depth	\$34.28	\$1,058

¹See Figure 3 for the location of the branch and section.

²L&T Cracking = Longitudinal and Transverse Cracking; LTD Cracking = Longitudinal, Transverse, and Diagonal Cracking; ASR = Alkali-Silica Reaction.

³Cost estimates are shown in 2016 dollar amounts. These estimates are based on broad statewide numbers and should be adjusted to reflect local costs.



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